The Founder Chancellor awarding a degree at the 16th Convocation

(Story P.5)

The Health Secretary and Pro Chancellor (Administration) at the inauguration of Covid Vaccination at SIMS Multi-Speciality Hospital

(Story P.3)

Webinar on Introduction to Securities Market

STAFF WRITTER

In Chennai, SRM Institute of Science and Technology, College of Science and Humanities, Department of Corporate Secretaryship and Accounting Finance has organized One Day Webinar on "Introduction to Securities Market" recently, in association with Metropolitan Stock Exchange, Securities and Exchange Board of India and Central Depository Service Limited. The key speaker of the webinar was Mr. K. Srikanth, deputy general manager SEBI, Hyderabad office, he delivered the lecture about the market regulators role and challenges in securities market and also addressed the issues and complainants of the investors, grievance redressal procedures. The next was a session followed by Mr. B M. Khaja Mohideen, Assistant vice president, Metropolitan Stock

Exchange limited, Chennai. He has discussed and nurtured the fundamental concepts of trading and investment in securities market, stock selection and opening of Demat account and its procedure. The final session was shared by Mr. B. Karthik, Head of Tamilnadu region, central depository service limited. He enlighten the students by sharing about the securities depository and its purposes, and he also emphasized the role of the depository instiutions in India. More than 200 participants participated including students, teaching faculty and from investor's community. This webinar was successfully organized and completed with massive support and assistant from Institution/ management, Dean, Academic dean, and faculty members and our beloved students.

SRMJEEE 2021 Registration begins for B. Tech courses

STAFF WRITTER

SRM Institute of Science and Technology (SRMIST), Kattankulathur, (earlier known as SRM University) begins the online registration process for its B.Tech entrance exam, SRMJEEE (SRM Joint Engineering Entrance Examination). Qualifying in SRMJEEE provides entry to all the campuses of SRMIST located at Kattankulathur (Main Campus), Vadapalani, Ramapuram, and Delhi – NCR; SRM University, Andhra Pradesh; SRM University, Sonepat– Haryana and SRM University, Sikkim. For further details visit www.srmist.edu.in.

Admissions to B. Tech program is only through the common entrance exam, SRMJEEE 2021, which is scheduled to be held in the second week of April, 2021 in 127 Indian cities and 5 countries (Dubai, Doha, Muscat, Bahrain, and Kuwait). Last year, there was an overwhelming 1.52 lakhs of candidates who participated to gain entry to India's No.1 multi-stream university.

Entrance examination date and joint counselling dates will be announced in due course as per AICTE, UGC and Government notifications.

Candidates applying should have secured a minimum aggregate of 50 percent in Mathematics, Physics, Chemistry/ Biology for all campuses except for SRM University, Andhra Pradesh which requires the minimum aggregate of 60 percent in Physics, Chemistry, and Mathematics in Class 12 or other equivalent qualifying

examinations. The admission would be based on SRMJEEE rank, subject to the eligibility criteria. Indians and Non-Resident Indians can apply for SRMJEEE 2021. NRI candidates who qualify in SRMJEEE 2021 and those who also go through regular counselling will be treated as domestic applicants for all the four years. NRI candidates appearing for SRMJEEE 2021 can switch to direct admission under International Category in case of being unable to secure the desired course in the joint counselling by paying International fee.

NRI candidates also have the option of directly applying under the International Admission Category to get admission to any program without taking SRMJEEE 2021 by paying the

international tuition and other fees. SRMIST has an enviable track record of 8500+ Job Offers with a top salary of Rs 41.6 LPA, the highest pay by any university for the graduating batch 2019-20. Around 625+ Top-notch companies, including Microsoft, Amazon, IBM, CISCO, Siemens, PayPal, Accenture, Capgemini, Hewlett Packard, TCS, Infosys, Cognizant, Wipro, ABB, L&T, Ford, TVS, Schneider, Renault Nissan, Cerner, GT Strategies, Ford, Bioclinica, and Zifo among many others, visit SRMIST every year to recruit our students.

The university offers a wide range of scholarships to the tune of Rs 35 Crores making studying in the university affordable to all. To apply and for more details, kindly visit www.srmist.edu.in.

Should animal testing be banned?

AASTHA AGGARWAL

Animal testing is a scientific experiment in which a living animal is forced to undergo experimentation for the sake of research, analysing the effectiveness of new medicinal products and industrial products such as cosmetics, household cleaners, food additives, pharmaceutical, and industrial/ agro-chemicals. Some advantages

of animal testing are that animals' DNA is similar to that of humans. For example, Chimpanzees have 99% genetically identical DNA. Animals also have similar diseases to that of humans such as cancers and asthma, making them a successful testing sample. Thanks to animal research, especially mice, cancer survival rates have risen. Herceptin, a mouse protein, has helped people suffering from breast

cancer. Animal research is also responsible for the development of asthma inhalers. Not only this, but smallpox is also no longer incurable due to studies made on animals. There are a lot of disadvantages concerning animal testing. First and foremost, the reason is that it is inhumane and cruel. Humans cannot even imagine the pain these meagre beings suffer behind the beautiful walls of cosmetic

factories. In the past, animal testing might have given results, but is now expensive and new technologies have been developed, which have proved far more accurate and cheaper than this method. Animals do not suffer from heart diseases, so testing these medicines on them is not only time-consuming but also ineffective.

Millions of animals, such as rats and mice are sacrificed in the name of scientific research. Thus, concluding that animal testing should be comprehensively

banned because it violates fundamental animal rights. It is not possible to stop animal testing suddenly, but if we start today, we can save these animals from pain and suffering shortly.

Animals locked inside many laboratories around the world ache with loneliness.

Vaccine Inauguration at SIMS!

STAFF REPORTER

Dr. J. Radhakrishnan, Principal Secretary, Health & Family Welfare Department, Government of Tamil Nadu Inaugurates the Covishield Vaccination drive at SIMS Hospital, Vadapalani

1500 frontline workers were administered the COVID 19 vaccination free of cost as part of phase - I of the immunization drive

SIMS Hospitals (SRM Institutes for Medical Science), Vadapalani, one of the leading multi specialty hospitals in Chennai, joins India's biggest vaccination drive against COVID 19 with 'Covishield' vaccine.

Inaugurated by Dr. J. Radhakrishnan, Principal Secretary, Health & Family Welfare Department, Government of Tamil Nadu, the 'Covishield' Vaccine will be provided free of cost to about 1500 healthcare workers as well as frontline workers of SIMS Hospital, in this phase-I of vaccination drive. Using their Government identity cards, health workers can register themselves to avail the free dose of 'Covishiled' vaccine.

Speaking on the occasion, Dr. J. Radhakrishnan, Principal Secretary, Health & Family Welfare Department, Government of Tamil Nadu said, "Building trust and confidence to motivate people to get vaccinated for good against COVID 19 is very important. I personally got the immunization vaccine administered to emphasize the vaccine's safety and efficacy. I am truly elated that the health workers who have already got vaccinated against COVID 19 are responding well to the vaccination too. Once the beneficiaries get their first dose of vaccine, they are still required to maintain all COVID 19 safety measures like wearing mask and sanitising their hands and diligently come for their second dose of vaccination without missing it".

Mr Ravi Pachamuthu, Chairman, SIMS Hospital, Vadapalani said, "It brings me great pride that SIMS Hospital is part of this historic effort and has joined India's biggest immunization drive against COVID 19 with 'Covishield' Vaccine. I feel proud to mention that SIMS Hospital has treated more than 3500 COVID patients in the past 10 months. Now, I am happy to share that eminent Doctors, Heads of Departments, including myself were among the first to take the Covishield Vaccine at SIMS. We sincerely thank the Tamil Nadu Government and the Central Government for giving us this opportunity to benefit a lot of people to get back to their normal lives and help them regain their livelihood".

Why does it take so long to create a vaccine?

LAWRENCE S.

Developing a safe and effective vaccine has traditionally been a long and complex process that takes decades to accomplish. It takes a very long time for proper academic research, experimentation, preclinical and clinical trials and finally getting government approval.

To make sure that vaccines have no harmful side effects, they must go through a rigorous standard of trials and experimentation. First, they go through the preclinical trials where scientists study the effect of the vaccine on cell cultures and animals such as lab rats. If they are able to produce a suitable immune response, they go through a three-phase clinical trial where it is tested on human beings.

The first phase of clinical trials is generally among a small group, typically a dozen people and the vaccine may go

Vaccines work by triggering a fight or flight response in our body.

through changes as the body's immune response towards the vaccine is studied. If passed, they go through the second phase where a much larger test group of varying ages and demographics are given the vaccine. In the third phase, thousands of people are tested. Each trial takes a long period of time and with each phase, the vaccine may go through several changes. Then, the vaccine needs to get through government approval. Some governments give emergency use authorization in times of an active pandemic like in the case of COVID-19. Finally, the vaccine needs to be mass-produced and distributed. These factors make vaccine production and its logistics a long and delicate process.

A step towards the future

AISHIKI HALDER

Research has always played an important role in the field of education and sciences as it enhances the growth of knowledge and facilitates the sharing of discoveries and advancements. With this in mind, the department of Electronics and Communication Engineering (ECE) of SRM Institute of Science and Technology, Kattankulathur hosted a 6-day, Faculty Development Program (FDP) on Insight of Analog and Digital IC Design (IADICD). ECE department which is known for its highly impactful journal publications and research in multidisciplinary fields currently has 50 research scholars under it and has awarded 12 patents. This FDP was organized as a means to nurture an environment for the exchange of technical details, research-oriented work and experiences from those best in their fields. It aimed at highlighting the technology and processes involved in the making of chip to wafer including all the areas of chip design, fabrication, manufacturing, reliability and testing. It also laid importance on the various issues that are and might be faced while designing chips and tools/packages that facilitate the design and verification.

The inaugural session was held from 09:30 AM to 10:00 AM. The chief guests for the event were Dr. T. R. Parivendhar, Founder Chancellor, SRMIST, Mr. Ravi Pachamoothoo, Pro-Chancellor, SRMIST(Admin), Dr. P. Santhyanarayanan, Pro-Chancellor, SRMIST(Academic) and Dr. R. Shivakumar, Pro-Chancellor, SRMIST.

Various industry experts, eminent academic researchers and students both from SRM and other established institutes and companies also participated in the event to share and learn about the new techniques, developments and difficulties in the field of Analog Digital IC Design.

Language Supremacy

GAUTHAM P PILLAI

In our country, English is the most admired language. A person who can speak English is considered to be educated. There is a misconception amongst our people that English defines class. Here is where our minds should change.

We tend to ignore our native languages and worship English and we often criticise and look down upon people who don't do the same. The same is not the case when it comes to regional languages. Evidently, our regional languages are taken for granted. No one is ever forced to learn these languages which may lead to their eventual extinction. There are differences between the language and these differences are alluring, but discrimination based on these differences is wrong. English is indeed the most popular language and it is commonly used in public spaces. But it doesn't justify the pedestal many people place it on. There are beautiful stories behind the formation of all the languages and we as humans cannot learn all the languages, but we can establish a common understanding and respect for these languages by providing appropriate held and guidance. We don't look down upon someone on basis of their vocabulary or accent. It goes without saying that linguistic chauvinism isn't something we should be aiming at. The need of the hour is to find a neutral point where we encourage every language and not discriminate against people based on the same. A simpler term would be linguistic equality. The lesser the discrimination the more we will have space for harmony amongst us.

There are 22 officially recognized languages in India

The Hopeless Fallacy of Freedom

DIKSHA AVIRAL

"If you want a picture of the future, imagine a boot stamping on a human face—forever."
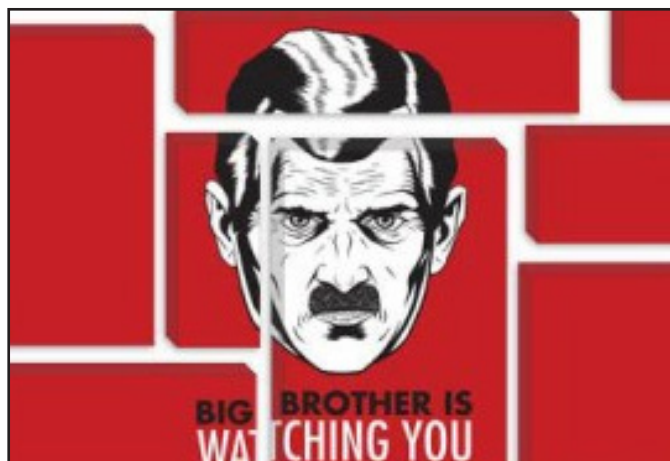
This is the future George Orwell imagines for us in his novel "1984". Jarring, isn't it? Few books catch you off guard the way "1984" does. It's a simple enough story, told and retold for ages. A man against an oppressive government, a man against the world, but what makes 1984 stand out from the myriad of dystopian fiction is quite simply, its feasibility.

Orwell's "Oceania" is not a post-apocalyptic wasteland; it is merely our world today absent of freedom of thought and human instinct. Orwell shows us how easily democracy can fall, how easily individual freedom can be taken away if we let the wrong people be in charge. It shows us that both freedom and slavery start from the bottom-up.

The protagonist "Winston Smith" is a middle-aged man, whose rebellion against the "Party" starts with nothing more than a pen and a diary. Over the course of the book, he has a lot of small but hugely significant victories, in the form of consciousness and

"Big Brother is watching you"

human connection in a world made devoid of all individual thought and feeling. But the book reaches its climax on a haunting note, as Winston is broken down to his very core, broken down enough to love the government he was once rebelling against.

This abrupt and frightening ending, more than anything makes "1984" the masterpiece it is. Orwell first explores human resilience in the face of disparity, tells us of love and trust in a bleak and dehumanizing societal structure and then shows us the true face of unflinching cruelty and hopelessness. There is truly no dystopian fiction quite equal to the genius and sheer impel of "1984".

"The best books... are those that tell you what you know already."

SRM team wins Flipkart GRiD 2.0Robotics Challenge

STAFF WRITTER

Four students from SRM Institute of Science and Technology, Kattankulathur have brought honour to their Institution by winning a national level robotics challenge. Team Robotronics consisting of Adrash, Ajit, Rishabh, and Shashwat (Final year B.Tech students from the Departments of Electronics & Communication and MechanicalEngineering) emerged winners among the 500 teams that participated in the national Flipkart GRiD 2.0 Robotics Challenge held in January 2021. Their problem statement was Autonomous Stair Climbing Robot. "We thought it would be very beneficial for the real-time scenario if prototyped and we had to do it within a budget of Rs.50,000," said the team. A total of nine teams got selected for the grand finale out of 120 teams. The key structure to their final presentation included - High-level solution walkthrough, Hardware choices (what & why), Software Choices (what & why), Simulation and Demo, Differentiation factor in the solution, and Feasibility & Challenges if actual prototyping is done.

We provided feasible solutions to many specific problems. A lot of new innovations were done in order to completely solve the problem statement. We provided a generalized solution which was compatible with most of the work environments."

The team was guided by Dr. Rajesh Agarwal, Assistant Professor, Department of Electronics and Communication Engineering, SRMIST.

The team was awarded an Electronic Gift Voucher (EGV) of Rs.1,50,000 for emerging as national winners. They also were awarded EGV of Rs.1500 for clearing the first round and getting into the top 50 teams and Flipkart Goodies.

The top nine teams, selected to the finale, were from some of India's most prestigious institutions and they showcased their solutions for problem statements on Autonomous Stair Climber, Autonomous Indoor Drone, and Intelligent Picking.

Fake circular on SRM circulated; police complaint lodged

STAFF WRITTER

SRM Institute of Science and Technology (SRMIST), Kattankulathur clarifies that the fake circular doing the rounds on WhatsApp asking all girl students to have at least one boyfriend is fake. The note which was circulated on social media platform was brought to the notice of the Institute's authorities and the administration clarified it as a fake.

A message from the SRMIST's Registrar office read, "This is to bring your kind attention that there is a couple of fake and inappropriate circulars being sent under the name and designation of SRMIST's administration/ Registrar. These circulars contain false information and spoil the image of our Institute. Henceforth, any person – student attempting to send such unauthorized letters will be dealt with firmly and expelled from the Institution."

However, to ascertain the source of the message, SRMIST has filed a complaint with the Cyber Crime police.

16th Annual Convocation

ISRO Chairman urges students to innovate at SRM's 16th Annual Convocation

STAFF WRITTER

"Always keep in mind the challenges our country is facing. Each of these challenges offers an opportunity for innovation," said Dr. K Sivan, Chairman of ISRO, Bangalore and Secretary, Department of Space, Government of India. Addressing students virtually at the 16th Annual Convocation of SRM Institute of Science & Technology (SRMIST), Kattankulathur, Dr. Sivan said, " The job scenario is vibrant today and one must definitely work more than others, know more than others and expect less than others."

About 17,204 students belonging to the Faculties of Engineering and Technology, Faculty of Science and Humanities, Medicine & Health Sciences and Management studies including 129 Ph.D. scholars received their degrees. 244 students were awarded medals for having secured First, Second, and the Third rank in their programmes. The event was held virtually as per the protocol of the Government of Tamil Nadu due to the ongoing pandemic. Based on the restrictions imposed by the State Government only Rank Holders and Ph.D. degree awardees were given their degrees in person at Dr. T.P. Ganesan Auditorium, Main Campus, Kattankulathur. The rest of the eligible graduands attended the event through virtual mode.

In his convocation address, Dr. Sivan said, "SRMIST has the honour of designing, developing, and building its own nano-satellite, SRMSAT, in collaboration with ISRO which was launched with the twin scientific objectives of monitoring and estimating carbon dioxide and water vapor in the tropical atmosphere globally. Our Government has already announced space sector reforms for greater participation of non-governmental entities in space activities. Our next PSLV launch will have satellites from start-up agencies as the first product of these reforms. I now invite SRMIST to join hands with ISRO to work on similar projects in the future."

He said that Prime Minister Narendra Modi's 'Digital India' initiative is another key area to leverage; ISRO has already

Dr. K Sivan, Chairman ISRO

initiated reforms to make its digital assets available easily to the industry as well as start-ups for making innovative applications in navigation, earth observation as well as disaster management.

"India is progressing and it has overcome many challenges. It is the young people who have to put your heads together; to not only discover more challenges but also find solutions. The most important things are taking calculated risks and innovation on how to implement ideas,' he said and added, "You may fail, but each failure will provide valuable lessons. You all must realize that if you are not failing then you are not trying hard."

India aspires to be a nation with sustainable, equitable, and inclusive growth. Today we know the focus areas where we need to prioritize such as high-tech manufacturing and train and attract world-class talent.

Speaking on ISRO technological development he said, "ISRO has done the technology transfer of its space-grade lithium-ion batteries to industry. This technology is useful for mass adoption of electric vehicles without remaining perpetually depending on foreign sources. Even in rocket propulsion, ISRO is developing gree propulsion for its human spaceflight missions. In the

future, all the propulsive stages may adopt green propulsion."

In his address to students Dr. T. R. Paarivendhar, Founder Chancellor of SRM Institute of Science & Technology and Member of Parliament, Lok Sabha said, "It is an honor for us to have Dr. Sivan Chairman ISRO. In his service, he was the chief mission architect for successfully launching 104 satellites in a single mission of PSLV. It is really an achievement. He has taken our country to a different height in the space research parallel to a few of the advanced countries."

He advised students to be alert and careful in retaining their jobs as there are competitions and challenges. "You need to continuously update your skill, knowledge, and talent in your respective field. The success of our alumni is the success of your alma mater. If you become GMs, CEOs, Chairman of a company or industry, the university looks forward, for your repeated visit, to share your eminence and experience to your juniors here." With the election around the corner, SRMIST's Founder Chancellor urged people to vote right for the right candidate.

Endowment award in the name of Tmt Pachimmal Palanimuthu for the best outgoing MBBS student and Tmt Swarnam &

Dr. Krishnamoorthy Endowment award for the best overall outgoing student of SRM Medical College Hospital & Research Center was awarded to Ms. Kritika Wadhwa for topping among all students in the final year and in the overall duration of the course in MBBS programme. Endowment in the name of Tmt Lakshmi and Dr. Renganathan for the best outgoing BDS student of SRM Kattankulathur Dental College and Hospital will be awarded to K. Shyam Sharma.

The Annual Report was presented by Vice Chancellor of

SRMIST, Dr. Sandeep Sancheti. The Convocation was held in the presence of SRMIST's Pro Chancellor (Administration) Shri Ravi Pachamoothoo, Pro Chancellor (Academic) Dr. P. Sathyanarayanan, Chairman of Ramapuram & Trichy campuses Dr. R. Shivakumar, Pro Vice Chancellor (E&T) Dr. C. Muthamizhchelvan, Pro Vice Chancellor (S&H) Dr. R Balasubramanian, Pro VC (Medical) Lt. Col. Dr. A. Ravi Kumar, Registrar Dr. N Sethuraman and COE Dr. S.Ponnusamy among others.

A Still from the show "Delhi Crime"

India's first win at the International Emmys

V. REVATHI AISHWARYA

The OTT platforms in India such as Amazon Prime and Netflix have been triumphant in showcasing the talent and creativity of Indian filmmakers. Three Indian shows - Made in Heaven, Four More Shots Please and Delhi Crime were nominated at the 2020 International Emmy Awards held recently. The award show serves as a platform to showcase the best television shows produced outside the United States. The Netflix original show Delhi Crime won the Best Drama Series award. The seven-part series which is

written and directed by Ritchie Mehta, adapts events from the horrific 2012 Delhi gang rape and focuses on the police investigation that underwent to nab the perpetrators of the crime.

The show sheds light on the way women are treated and perceived in the country. While it was praised for its painstaking attention to details and stellar performances, it also received some criticism for its overtly sympathetic portrayal of the Delhi Police. Nevertheless, this achievement is an important milestone for the Indian film industry in gaining international attention.

Entrepreneur 2.0

B.KAVYA SHRUTHI

We've grown with archetypal ideals, looking up to superheroes and fantasizing over having one's potential superpowers to save humanity from the evils of the society. If you think these are merely fictional and impossible, you just might not have been introduced to Social Entrepreneurs yet. They are the people who formulate and implement disruptive and sustainable entrepreneurial solutions to the most pressing global issues for zero or minimal monetary profit. The concept of Social Entrepreneurship became prevalent only after the digital and internet revolution in the 2000s. The advancements and science and technology have made it convenient for entrepreneurs

to find ideological twins for collaboration, impart knowledge and training to shareholders, and to widely market and scale one's business with the help of technology-driven business models. In today's world, the youth hold great enthusiasm to provide sustainable and innovative solutions to socio-economic and global issues. One such exemplary social enterprise is Aravind Eye Hospital. The hospital functions with efficient operational costs by implementing tiered pricing, thus providing affordable medication and care to all sections of the society.

"India is a key country to look for leading social entrepreneurs" says Klaus Schwab, executive chairman and founder of the World Economic Forum. The

> *" "India is a key country to look for leading social entrepreneurs" says Klaus Schwab, executive chairman and founder of the World Economic Forum "*

challenge lies in funding and implementing the enterprise in testing conditions which are being overcome with sheer creativity, resolution and perseverance. Behold, for social entrepreneurs are the knight in shining armour, the belle of the ball and the need of the hour, for this century.

(Left) Doctor, social entrepreneur and founder of Aravind Eye Hospital Dr Govindappa Venkataswamy (Right) Ecstasy brimming in underprivileged women treated in the hospital, Madurai.

The Triboindia 2020

SRISHTI C
PRIYANK KAPOOR.

Though the year 2020 mostly had academicians of Biology engaged to come up with a hopeful response to COVID-19, the Tribology academicians concluded the eventful year with the 5th Instalment of the National Tribology Conference. Tribology is derived from the Greek word 'TRIBOS', which means- Rubbing. Tribology is a multidisciplinary subject which deals with the topics of Friction, Lubrication, and Wears Technology. The NTC's importance was first recognized and initiated by the Tribology Society of India of TIS, which is an umbrella term under which works related to Tribology in India are performed by industry-level professionals and organization members. The first Tribology-centric conference held back in the days at a global scale by IIT, New Delhi by the name of World Conference of

Industrial Tribology (WCIT) saw the importance of tribological advancement in India. The National Tribology Conference, renamed as TRIBOINDIA 2020, was held recently, which accumulated a considerable number of academicians from various regions, via an online platform hosted by the Mechanical Department of SRM Institute of Science of Technology, Kattankulathur. The online nature of the much-reputed conference was a new aspect of the gathering, which is held once every 2 years. With proper Tribology methodologies being treated as a pivotal point of importance to enhance the efficiency of operations, uplifting plants and machinery, along with the reduction of energy expenditure, and breakage prevention, the Conference was an online success with quite a number of contributions by tribology enthusiasts and professionals.

How fan following can become toxic for society

ANAMIKA TRIPATHI

Politicians, actors, sports personalities, motivational speakers, television personalities, and social media influencers. The list of people and professions that common man admire, look up to and perceive as ideals are never-ending. The concept of fan following is similar to this ideology. But how could something driven by admiration and love become toxic?

However, when admiration blindsides one's understanding of ethic, freedom of expression, right and wrong this can quickly turn toxic for the individual and the society.

It is human tendency to think of our opinion to be the right one and we consciously or

subconsciously expect the society to hold the same opinions too. The nature of fan following is also subjective to the same. Few examples of these could be the fans supporting their public figure even in obvious circumstances of wrong practices when their personal opinion clouds their judgement.

Human behavior is influenced by several factors and in this case of fan following these factors could be our perception of the personality, a predominant public image of a character or role overshadowing the person's personality and more.

If fan following can indeed be toxic for the society and the individual, what could prevent it from being toxic? A genuine understanding of

"I will drown too after you even though I know to swim."

admiration, respect for public figure's individual lives and personalities and openness to welcome different opinions on the same subject can go a long way in keeping our society free from this toxicity.

SRM Institute of Science & Technology partners with iSchool Connect Technologies to guide potential study abroad aspirants

STAFF WRITTER

SRM Institute of Science & Technology, a prominent Indian higher education institution, recently announced an exclusive partnership with iSchoolConnect Technologies Pvt. Ltd., a USA and India-based company that uses AI technology to provide study abroad assistance.

This unique partnership will benefit all study abroad aspirants at SRM Institute of Science & Technology. It will provide them access to expert consultations and unique AI tools which will empower them in pursuing their higher education abroad.

Regarded as one of the top educational institutions in India, SRM Institute of Science & Technology hosts thousands of students who later move on to pursue higher education. To encourage students to pursue the best possible educational options both in-country and abroad, SRM Institute of Science & Technology has several programs in place. Some of those international objectives include their Semester Abroad programs, Dual degree program, and alike. To broaden their sphere of international education assistance, the partnership with iSchoolConnect came into existence. On the Institute's behalf, this initiative is being led by Mr. Kartar Singh, the Director of International Relations at SRM Institute of Science & Technology, and his team. When asked about their motive for partnering with iSchoolConnect, Mr. Singh states, "Going overseas for higher studies is a growing ambition for many of our students, to gain new knowledge, experience different cultures, position themselves for the new age competences and skills of a dynamic work environment and to chart out their careers. In order to do this they need an unbiased and comprehensive platform that is responsive and aids them in the entire journey of gaining entry into an institution of their choice. We are happy to be partnering with iSchoolConnect which provides an end –to-end solutions package for our students to meet their aspirations for higher studies abroad." Expanding further upon the nature of their collaboration, Mr. Vaibhav Gupta, the Alliances and Marketing

Head at iSchoolConnect says, "The goal of this association between iSchoolConnect and SRM Institute of Science & Technology is to encourage the potential among all students who wish to study abroad and make them aware of the multitude of options that they can explore."

How will iSchoolConnect guide the students?

iSchoolConnect Technologies has a team of study abroad experts that provide end-to-end assistance to all students who wish to pursue their education abroad. What makes them unique is the cutting-edge AI technology they provide to students that helps them conduct many of their application process tasks online.

With this partnership, the students at SRM Institute of Science & Technology will be able to access an exclusive set of benefits that will help them with their study abroad journey. The benefits include:

• Access to iSC's AI tools-

> " *Some of those international objectives include their Semester Abroad programs, Dual degree program, and alike. To broaden their sphere of international education assistance, the partnership with iSchoolConnect came into existence.*
>
> • *iSchoolConnect Technologies has a team of study abroad experts that provide end-to-end assistance to all students who wish to pursue their education abroad*
>
> • *The goal of this association between iSchoolConnect and SRM Institute of Science & Technology is to encourage the potential among all students who wish to study abroad and make them aware of the multitude of options that they can explore.* "

Recommendation Engine, AI Writing Mentor for essays and SOPs, AI Video Interview tool, and much more.

• Personalized one-on-one mentorship sessions.

• Webinars and workshops at regular intervals to guide students.

• Access to the iSchoolConnect Student Community- a not for profit initiative powered by iSchoolConnect which is driven by the students, for the students.

Listed above are just a few among the many ways iSchoolConnect will assist the students at SRM Institute of Science & Technology. With applications for all global universities coming up, iSchoolConnect's assistance will prove crucial to all students that plan on studying abroad.

Activities at SRM University Delhi - NCR, SONEPAT

Department of Biomedical Engineering / Biotechnology / Microbiology

STAFF WRITTER

The Department of Biomedical Engineering, Biotechnology, & Microbiology organized an expert talk on Vaccines against COVID-19. The Guest Speaker of the session was Jorge Kalil, a Professor and Head of the Clinical Immunology and Allergy Department at the School of Medicine, University of São Paulo and Distinguished Visiting Professor at Harvard Medical School and Harvard School of Public Health, USA. "The vaccine we are proposing resembles the protein coat of a virus. It has the external part of a virus, but it doesn't have nucleic acid inside, which is what allows it to multiply," Kalil said.

Photo - Webinar on Vaccines against COVID -19 on December 3rd, 2020.

Senior Wing Inaugurated at SRM University Delhi-NCR, Sonepat

A National Cadet Corps Senior Wing was inaugurated at SRM University Delhi-NCR, Sonepat. The Chief Guest for the inaugural ceremony was Col. SK Sood, Commanding Officer, 12 Har Bn NCC Sonepat who was joined by Prof. Manish Bhalla, Registrar, SRM University Delhi-NCR along with a host of other dignitaries. Addressing the gathering, the Chief Guest expressed his delight at the earnest intent of SRM University Delhi-NCR in promoting a Senior Wing of NCC in the University. Prof Manish Bhalla speaking on the occasion expressed his delight that the NCC wing was finally opened in the University for its students to enroll and serve. He stated that activities and training imparted by the NCC has always made a positive impact the students and was very certain that it would do the same bringing out the natural leadership in the students of SRM University Delhi-NCR.

Celebration of National Mathematics Day on the occasion of 133rd Birth Anniversary of famous Indian Mathematician Srinivasa Ramanujan.

National Mathematics Day was celebrated on the birth Anniversary of Shri S. Ramanujan on 22nd December, 2029. The main objective behind the celebration was to create awareness among students about the importance of mathematics for the development of humanity.

An invited special talk on the topic "Operations Research and its applications" By Dr. Madhu Jain, Professor, Department of Mathematics, was followed by an online quiz competition for the student participants.

Extra Curricular Activity Conducted

The Department of Commerce organized a Chess Championship for the students from 2nd November. Students displayed active participation in the activity as players as well as organizers. Shivam was the winner in boys group and Ishita Aggarwal was the winner among girls. The Prize distribution ceremony was chaired by Registrar of the university, Prof. Manish Bhalla and winners were announced by Director(Admissions), Dr. Pankaj Sharma, to encourage the students.

Certification by world chef choice federation magazine

The "Certification by world chef choice federation magazine" was held on 1st November, 2020. Experts for the event were World Master Chef, Sylvester Rosario, Chef Dayashankar Sharma, Chef Dr. Izzat Hussain, Chef Debasis Pandey and Chef Nitesh. The students and faculty members of the Department of Hotel Management participated in the event and won awards in categories such as "Culinary Quest for Quick Recipe", "Best Restaurant Consultant", "Best Hospitality Educator Front Office" and "Food and Beverage Service".

Two days bakery workshop

A two-day bakery workshop was held on 24th and 26th November, 2020 at SRM University Delhi-NCR. Mr. Amit Kumar was the expert for the workshop. The workshop was on baking banana cake, chocolate muffins and such other baked food items.

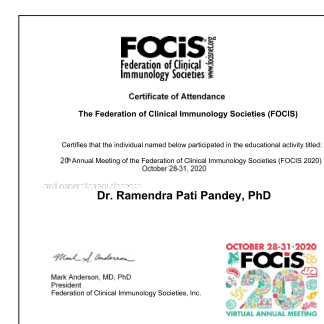## Certification by konceptual initiative

A certification was held by Konceptual Initiative on 29th December, 2020. The expert for the event was Mr. Mohit Cats. The faculty members of the department, Mr. Sunil Panwar, Mr. Rohit Kumar and Ms. Sanskrit Singh received certification in the category of "Outstanding Adaptibility and Collaborative Learning - Higher Education".

Seminar on future prospects and management of healthcare industry in india

A seminar on" Future Prospects and Management of Healthcare Industry in India" was held on 18th January, 2021. Dr. Sumesh Kumar, Assistant Professor, IIHMR was the expert speaker for the event. All the students and faculty members of the Department of Hotel Management, SRM University Delhi-NCR were part of this seminar.

Dr. Ramendra Pati Pandey received certificate from the Elsevier Journal in the recognition of the review contributed to the journal. He received the certificate from The Federation of Clinical Immunology Societies (FOCIS), and Ministry of Electronics and Information Technology, Government of India.

Living in a Dream

SHRAVYA SHARAN

The world, through a child's mind, is full of wonder and possibilities. Their minds are free to conjure up a world that embodies anything they desire. Be it serving dishes cooked by our five-year-old selves on kitchen sets or pretending to be part of an elite force of power rangers.
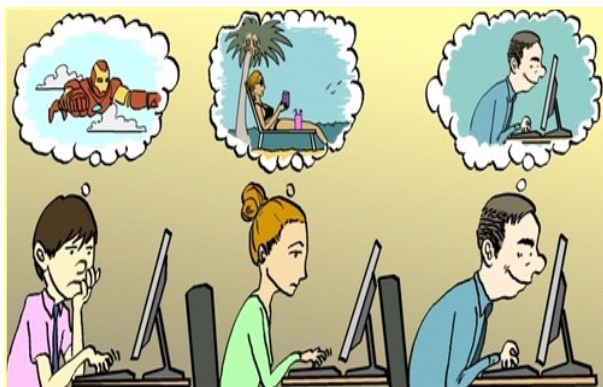
Despite creating absurd scenarios as kids, reality was never completely removed. Kids knew that food would not satisfy the hunger nor would a power ranger's costume give superhuman abilities. Yet, being invested both physically and emotionally was quite common. This is maladaptive daydreaming in a nutshell.

In 2002, an Israeli professor named Eli Somer published a paper describing a condition coined 'maladaptive daydreaming' or MD where people spent extensive time in a self-designed imaginary world. They are aware that this world is fantasy, and hence manage to retain contact with the 'real world'. But in extreme cases, extensive fantasy activity may replace human interaction and interfere with academic, interpersonal or vocational functioning as shown in 'The Secret Life of Walter Mitty'.

A person who is purported to have MD may experience extremely vivid daydreams with their characters, settings, plots and story-like features or perform repetitive movements, make facial expressions and whisper and talk while daydreaming. Owing to the absence of a medical recognition of the condition, MD is often treated as a neural biochemical imbalance rather than an addictive symptom stemming from trauma, or a void in the individual's life.

Experts believe that cognitive-behavioral therapy can help control excessive daydreaming. One study claims fluvoxamine, a drug commonly used to treat OCD, can help control MD as well. When the medical community formally recognizes the disorder, perhaps, there will be more streamlined and nuanced approaches to treating those held hostages by their daydreams.
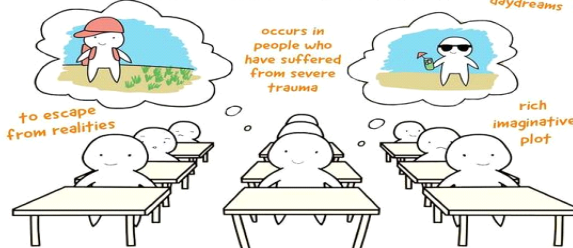
> **" *Kids knew that food would not satisfy the hunger nor would a power ranger's costume give superhuman abilities.* "**

MALADAPTIVE DAYDREAMING

a psychiatric phenomenon that can interfere with your ability to carry out daily tasks

vivid detailed daydreams

occurs in people who have suffered from severe trauma

to escape from realities

rich imaginative plot

Daydreams of youngs and adults

New Year, Better You

SHRUTI RAMESH

The year 2020 will undoubtedly go down as one of the most intense and eventful 366 days in history. From bushfires and locust swarms to a pandemic that forced the world into quarantine, humanity truly saw it all. Although the year was taxing and put everyone on edge, there are quite a few takeaways that can make the future much more rewarding.

Until the coronavirus pandemic hit, extreme productivity was all the rage. The lockdown put things in perspective and helped people realise that it's okay to take a break and focus on their mental health, so that they don't burn out. After all, taking care of oneself counts as being productive. 2020 also opened people's eyes to their effect on the environment. The nationwide lockdown forced everyone indoors, leading to significantly lowered pollution levels. New Delhi, notorious for its smog, saw an average AQI of 83.8 in March, as opposed to

Although 2020 has caused 2021 to look bleak, there is hope for the world if people take action.

its usual 300 or so. Apart from cleaner air and water, there was also a global decrease in carbon emissions. There is no better evidence to prove that with small changes in their lifestyle, humans can turn the tide on environmental issues such as climate change. Reduced human interference saw animals roam free as well, taking back their homes that human beings have invaded for centuries. In early 2020 alone the number of

> **" *There is no better evidence to prove that with small changes in their lifestyle, humans can turn the tide on environmental issues such as climate change* "**

sea turtle nests almost tripled, with some of the endangered creatures laying their eggs on empty beaches in broad daylight for the first time in decades.

There's no saying when the pandemic will come to a halt or how much more eventful 2021 might be; but if people learn their lessons from 2020, the world can become a much brighter place. Hopefully humanity walks into 2021 kinder, stronger, and better.
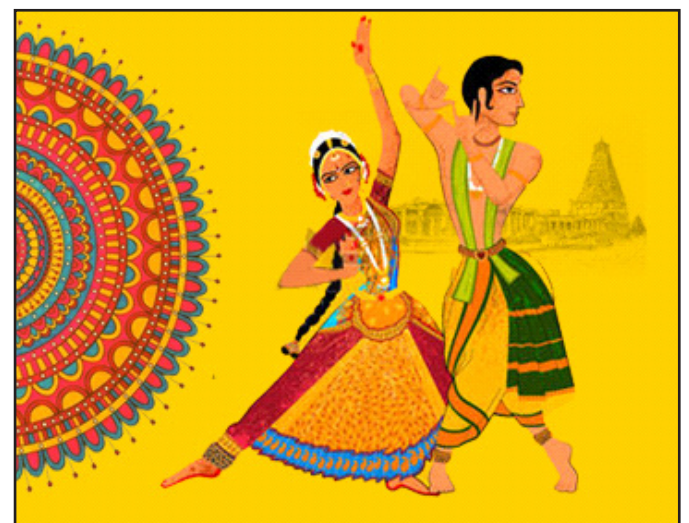
Margazhi festival 2020

PRIYANKA R

Amidst all the chaos that the past year threw at them, the classical artists of Chennai have dusted it off and begun preparing themselves to get back on the grind. Since the sabhas have now been permitted to host performances, classical music and dance troupes have secured slots to perform for the most awaited season of the year, the Chennai Music Season, well known as the Margazhi festival.

The Margazhi festival takes place from mid-December till mid-January, which marks the Margazhi month or the 9th month of the Tamil calendar. It was first organized in 1928 to rejoice at the first anniversary of Madras Music Academy. About 2000 participants gather and perform over 300 concerts to honour the festivity.

Although, cultural events have been permitted to be held in closed spaces, while following the COVID-19 protocols to allow a maximum capacity of 50%, maintain social distancing, use

Enthralling margazhi utsavam

hand-sanitizers, and to follow strict adherence to the Standard Operating Procedures.

However, keeping in mind the vulnerability of the dangerous situation, The Music Academy has decided to conduct its music concerts online this year. The President of The Music Academy shared that, "Since 1928, the year in which the Margazhi Festival was founded in Madras by the Academy, we have been hosting it uninterruptedly.

Even during World War II and the 2004 tsunami, the festival continued. However, this year, with the pandemic still raging unabated and the uncertainty that looms large because of it, we have decided to take the festival online.

The online festival may not be the same as the physical concerts, but since health and safety precede all, rasikas (patrons) have been forced to resort to virtual concerts.

Plath won the Pulitzer poetry prize in 1982

Sylvia Plath and her depression

ANAHITA GUPTA

Depression - a single definition is not enough to describe this illness that more often than not drains the life out of a person. Sylvia Plath, a 19th-century poet, novelist, and short-story writer was diagnosed with clinical depression for most of her adult life. The theme of suicide and depression were embedded deep in her works. It is not surprising to note that artists like her often derive from their personal experiences and grievances.

Plath experienced her first brush with depression when her father died just days after her eighth birthday leading her to write the poem "Electra on Azalea Path". She made her first suicide attempt at the age of 20, later writing that she "blissfully succumbed to the whirling blackness that I honestly believed was eternal oblivion." A month before this, a creative figurative language almost disappeared from her writing- replaced by rough, fragmented sentences revealing the rawness of her mental state. Though Plath's depression- believed to be hereditary- was inevitable, her death wasn't. Through her final episode, triggered mainly by marital crises, she still remained professionally active, writing daily. Her semi-autobiographical book "The Bell Jar" was published to tepid reviews, mere weeks before she killed herself. That became one of the various factors that finally led her to commit suicide, on February 11, 1963, at the young age of 30.

"I am only thirty," the narrator of Sylvia Plath's 1962 poem, "Lady Lazarus," announces early. Sylvia Plath remains one of the greatest poets despite her small body of work. Now, all we have left is a raw image, sometimes blurry, of her life preserved in her art - her poems.

Reporting for Spectrum

- Contributing reports should be confined to a maximum of 250 words and must be written by students only.

- Accompanying pictures must have captions. Pictures without caption will not be published

- Request for coverage in Spectrum by its editorial team must be made well in advance with an accompanying note and the invitation to sridhark@srmist.edu.in

- Coverage of a certain event or receipt of an article does not guarantee publication.

–Editor

Breaking Records and Barriers Virtually

ISHIKA GHOSH
PRIYANKA SRINIVAS

The Directorate of Student Affairs (DSA) at SRMIST, in association with the National Youth Council of India, held a virtual yoga session recently. Being the first of its kind, this event was conducted to create an award-winning record for the maximum number of people holding the Diamond Pose (Vajrasana) on a virtual platform. The event was hosted by V Vision.

The event was presided by Mr. Dinesh Kashikar, Chief Guest of the event, and a close disciple of Gurudev Shri Shri Ravishankar. Mr. Kashikar gave a welcoming speech that reflected on his journey as a Director at the Sri Yoga Institute, India. It was followed by an introductory session on the Asia Book of Records, a platform where the

Receiving the world record certificate

record holders of major National 'Book of Records' including 'India Book of Records', 'Nepal Book of Records' etc. meet to claim the title of 'Asia Book of Records' Holder. From 9 am onwards, the attempt began and turned out to be a huge success after its completion 10 minutes later. The event continued, with a speech by the Guest of Honour,

Dr. T. Mythili, the Director of Student Affairs at SRM. Many nuggets of information about yoga and meditation were provided by the chief guest, who conducted an energizing yoga session of 45 minutes. Overall, with the support of the DSA and SRMIST, the entire event was informative and record-breaking.

Colour is a power which directly influences the soul.

The Psychology of Colours

NANDINI NIGAM

John Ruskin once said, "Everything that you can see in the world around you presents itself to your eyes only as an arrangement of patches of different colours." Every day we see a total of seven million and the colours signify different things spiritually, psychologically, and emotionally. Colours' significance varies between cultures and religions.

Sadhguru's definition of colour is that colour is not what it is but what it reflects. What one reflects, becomes one's colour. The grass reflects green colour and holds back the rest of the colours. People on the ascetic path do not want to wear anything as they do not wish to add anything new to themselves. They just want to work with what they have. The colour that we reflect becomes a part of our aura. Colours not only influence us emotionally by providing different feelings like relaxation, warmth, calmness, anger etc. but also are key in fields of branding and marketing. A study suggested that eighty percent of brand recognition is due to colours. In 2013, Google acquired an income of two hundred million dollars just by changing the colour of their trade link. Colours have a huge impact on our lives. An experiment was conducted in an elementary school where the walls of the classrooms which were once painted beige were repainted pink. After a few months, drawings showcased the impact of this change. The smiles were wider, and paintings looked happier. Colours influence our minds. A person works much more creatively and effectively in a blue room than a white one. Culinary geniuses make sure to use colours to make their dishes look more pleasing. Colours enhance what lies on the surface while reflecting what lies within.

Bring change but only for yourself

New Year-New Me?

LAKSHMI VIBHA

The tradition of New Year Resolutions dates back to over 4,000 years, the ancient Babylonians made promises to their gods at the start of every year. The Romans made promises of good behaviour in the year to come to Janus, after whom January is named. The god was said to be two-faced, symbolically looking at the previous year as well as the new. The Christians adopted the Covenant Renewal Service and the Jews ended their New Year celebrations with Yom Kippur, known as the Day of Atonement. Regardless of the creed, the basic concept is the reflection of past behaviour and making a promise to better yourself. By 1802 the traditions of making Resolutions (and failing to keep them) had become so famous that people had now started to satirise them.

At least 40% of people in the US set new year resolutions, 22% of people in the UK set goals for self-improvement through Resolutions. Yet, a study shows that 80% of people break their resolutions by the first week of February and a survey by Statista shows that in 2018, only 4% of people say they achieved what they set. Resolutions are a way for people to let go of all the bad decisions they made in the past and start over without feeling the weight of their failures. Goals, especially short-term ones are more actionable, thus are a more effective way to bring about change. Studies show that the success rate of goals is higher than that of Resolutions. The key is consistency, setting a maximum of 3-4 goals, and focusing on them will go a long way. Putting in hard work and focusing on the big picture is sure to obtain results!

Music Helps You Heal

JELSIA ALEX

'Your heartbeat changes and mimics the music you listen to'

Listening to music utilizes your entire brain and enhances the physical activity you do at that time. Good music can keep you energized throughout. When you listen to your favourite music the 'reward' part of the brain lights up and releases good feeling chemicals into the brain. This eventually enlightens your mood and intensifies the speed of your present activity.

Music Therapy is one among the flourishing fields. It has been helping a lot of people to recover from various ailments. Trained musicians combine their musical knowledge in a variety of styles and identify the genre of music that relaxes your mind. It touches all facets of the mind, body and brain.

Gains of Music Therapy:

Relieving discomfort during treatments

In supervised clinical trials of people undergoing surgeries and post - surgery medications, those who listened to music before and during their procedure, needed less sedatives and testified less discomfort than the norm.

Controlling pain

Music has been measured

Nothing can comfort you like Music does

as potential medium to relieve pain in both acute and chronic diseases. It reduces the number of drugs and pain medications given to patients such as people suffering from chronic arthritis, undergoing chemotherapies and pregnancies.

Depression treatment

Music therapy when combined with Psychotherapy works more efficiently for people with depression than when given Antidepressants. It also helps to partially cure people with insomnia. Music has always been an innate part of human behaviour. Music can make anything memorable and irreplaceable and helps connect with different kinds of people. It not only aids you to regain your memory but also allows you to relive the moments locked away in a remote corner.

Nobel Chemistry Prize: The Technology That Won Our DNA Over

KRITIKA MALHOTRA

This is the dawn of an era in which the specific editing of our genes is possible. Nobel Laureates Jennifer Doudna and Emmanuelle Charpentier investigated viral infections in bacteria and discovered CRISPR/Cas9 in 2012. This technology is like a word processor for our DNA – it can cut, delete, and insert genes at a site. This phenomenal revelation has far-reaching implications for deliverance and maybe, possible disaster.

A virus cannot survive without a host. It aims to invade the bacterium, hijack its reproductive mechanism by inserting viral DNA, and multiply. The bacterium then dies. However, scientists

observed that some bacteria survive viral infections. These survivors had a copy of the virus's genes incorporated in their DNA, stored like a memory.
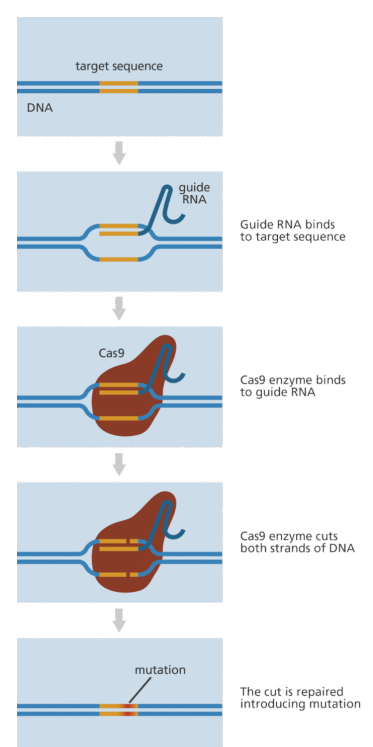
When a known virus reinvades, the bacterium makes a copy of the virus's genes it had (known as guide-RNA) and hands it over to a protein called Cas9. This protein can cut DNA at specific sites, depending on the guide-RNA it is carrying. When the DNA of the invader matches the guide-RNA, Cas9 cuts the DNA, rendering it inefficacious.

This mechanism was adapted for humans by scientists, by reprogramming the guide-RNA according to our needs.

Once the DNA is cut at the site of interest, a gene of our choice can be inserted in its place. This technology can be used to treat people with genetic disorders, by replacing the malfunctioning gene with a functioning one. Trials for cystic fibrosis, sickle-cell anaemia, etc are underway and show great promise. While it can be

used for treating diseases, it can also be unethically used to enhance our characteristics – like making a person more muscular or immune to pain. This poses an ethical concern. Technologies aren't inherently good or evil. They are tools; they are power. What one does with its result determines whether it's something that is applauded or deplored.

> " *A virus cannot survive without a host. It aims to invade the bacterium, hijack its reproductive mechanism by inserting viral DNA, and multiply* "

How CRISPR/Cas9 Works
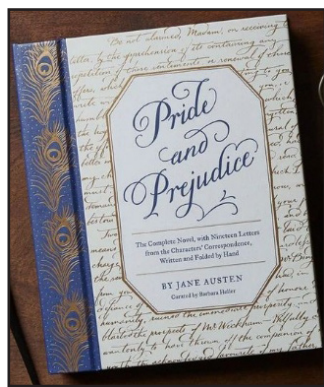
Shreya Khera

STAFF REPORTER

"It is a truth universally acknowledged, that a single man in possession of a good fortune, must be in want of a wife."

Pride and Prejudice, a classic romance novel published by Jane Austen in the early 1800s is nothing less than revolutionary. Considered as one of the most famous female writers of all time, Jane Austen revitalized the characters. Strong, opinionated, and firm, they broke stereotypes. "It is a truth universally acknowledged that a single man in possession of a good fortune must be in want for a wife", a quote acknowledged by many, is a call-out for the heteronormative idea of the "need" to marry and start a family to gain a certain validation from society.

The book revolves around Ms. Elizabeth Bennet, a strong opinioned woman, and Fitzwilliam Darcy, an aristocrat. Mr. Darcy is an aloof bachelor, who fails to express his feelings. On the other end, Ms. Bennet is a woman of pride and respect. There is a wide emotional diversity throughout the book. While Elizabeth learns the repercussions of hasty judgments, Darcy understands that the world is not always going to be at his feet.

The book is filled with witty lines such as "I must learn to be content with being happier than I deserve". The novel makes it into the heart of every reader that opens it. Melancholic and captivating, it shows growth and development. As the imperfect characters learn from their mistakes and grow, they find new ways to steal your heart. It shows a realistic depiction of lives and is a must-read.

*Pride and Prejudice –
a look into the 1800's*

The first Indian female doctor with a degree in western medicine-Life of Anandibai Joshi

SHASHANK IYENGAR

As the famous saying goes, "There is no force equal to a woman determined to rise". It is with such impel that Anadibhai Joshi had risen above all odds in the late nineteenth century to establish her as the first female Indian physician. She was also the first woman in India to complete her studies in western medicine from the United States. Anandibai's rich legacy has inspired many women to pursue the field of medicine in India and the United States. She was born on 31st March 1865 in Kalyan, India. The norm back in the days was to get children married at young ages and Anandibai was also not spared by this system. She was married at the age of 9 to Gopalrao Joshi who was twenty years elder to her. At the age of 14, she gave birth to a baby boy, unfortunately, the child died due to the lack of medical care; this incident proved to be a turning point in the life of Anandibai, who then decided to become a physician. There was very little to no support by the society and husbands supporting their wives to pursue their education was just as rare as fire rainbows in the sky. However, Gopalrao was one such exception of a fire rainbow. She continued to pursue her education in Sanskrit and English and later her dream of being a physician. She left for America to learn medicine in utmost detail with a missionary from Philadelphia named Mrs Carpenter. Anandibai completed her two-year course in medicine at the age of 19 and graduated with a degree in MD in 1886 despite her deteriorating health. Tragically, Anandibai lost her life to tuberculosis and died at the young age of 22. Wonder women like Anandibai Joshi have proved that educating women is educating an entire generation. Her legacy will continue to live in the hearts of many.

What if We Were in a Nuclear Winter?

M KAVIN RAMNATH

Nuclear winter, a topic which many may dismiss as "fictional", is actually a very real possibility in today's world. The nuclear weapons that mankind possesses today are a hundred times more powerful than "Fat Man", the nuclear bomb dropped on Nagasaki; the devastating effects of which have lingered onto the present day.

With many nations armed with such dangerous weapons, humans are the creators of the biggest threat to mankind yet. Modern technology eliminates the need of a bomber aircraft to drop the bomb; intercontinental missiles can simply traverse across the globe to hit its target. Retaliation will lead to an all-out nuclear war, plunging the world into a nuclear winter.

Radioactivity may cause mutations in man and other creatures, possibly transforming them into dangerous abominations. People will be forced to live in underground bunkers to shield themselves from the radioactivity. Radioactive dust will cloud the atmosphere, blotching out the sun for several decades, killing most plant life. There

Nuclear winter as depicted in 'Metro 2033 Redux'

are several books, movies and video games, such as the 'Metro' and the 'Fallout' series, which provide speculations on how the world may turn out to be; but let us not depend on such fictional sources. Several modern day studies have shown that a nuclear winter can cause a massive change in climate patterns, lead to accelerated ozone layer depletion and an enhanced greenhouse effect. People exposed to such nuclear radiations will suffer radiation sickness, followed by a gruesome death. Children born to the survivors may also be affected.

The best way to be safe will be to wait it out in a well-stocked bunker. However, with the

> " *Several modern day studies have shown that a nuclear winter can cause a massive change in climate patterns, lead to accelerated ozone layer depletion and an enhanced greenhouse effect* "
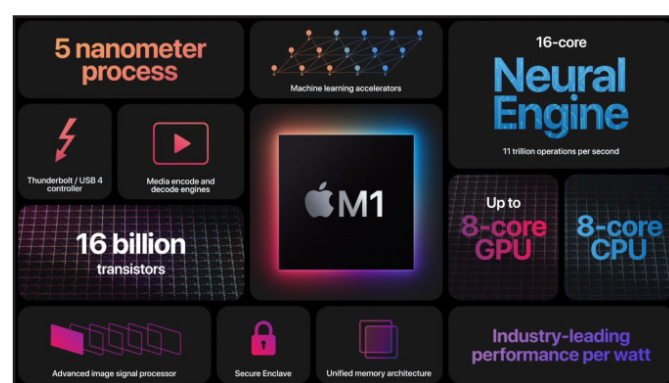
world shifting to other kinds of warfare, such as economic and cyber warfare, the prospect of using nuclear weapons is reducing. Hopefully, mankind will never have to face such a nightmare.

Revolution in a Chip

SUMISHA MOHAN

Apple's M1 Mac Books released amidst fervent anticipation and the verdict is in: they have surpassed all expectations. When Apple unveiled plans for in-house silicon that would greatly improve both the performance and the battery life of their Macs, they were met with as many sceptics as supporters. In terms of numbers, the power-efficient M1 processor delivers 40% better performance on a popular CPU benchmark and 70% longer battery life for web browsing when compared with an Intel-based Mac Book released earlier just this year.

However, changing from Intel's x86 instruction set to Arm creates software problems. Apple has had to port its Mac OS operating system along with all of its first-party apps to run on Arm. These native apps take full advantage of the M1's superior performance and battery life.

Many third-party apps, however, are coded for Intel processors only. To provide compatibility with these apps, Apple provides an emulator (called Rosetta 2) that translates from x86 to Arm, but on the M1 these emulated apps run at a lower speed or in some cases, not at all. However, developers are currently working to develop apps which will run natively on Apple Silicon and this roadblock will be removed fairly soon. With the M1 chip, Apple has finally done what tech companies have been trying to

achieve for a long time. These in-house chips will grant Apple complete control over both their software and the hardware, allow the company to exercise more freedom over the design, development and launch cycle as well as further their mission of vertical integration. Apple's gamble has paid off and their Arm-based Macs have left the Intel-AMD duopoly in the dust. Microsoft will most likely follow suit which will lead to a burst of innovation in the long-stagnant PC space.
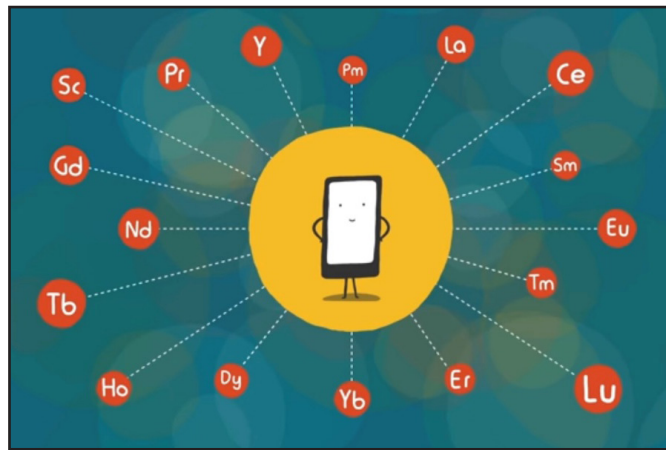
Will Smartphones be Available in a Decade's Time?

RAMAY RAJ SINGH

"Cell phones are so convenient that they are an inconvenience." – Haruki Murakami

From trading to communicating, smartphones are everybody's go-to modes. They easily fit in pockets and still allow one to complete complex tasks on the go which was unimaginable around the beginning of this century. But just like a coin, this seemingly ultimate invention also has another side.

Smartphone manufacturing is not an easy neither an affordable task. Out of the 118 known elements of the periodic table, 75 of them can be found in a typical smartphone. Elements like silicon are used in the making of transistors for SOCs (i.e., the processors), gold is typically used for electrical wiring, indium for touch screens, lithium and cobalt used to manufacture batteries, rare earth elements are used in the making of speakers, vibration motors and also for the display.

Some of the elements that are used in the making of a typical smartphone.

There is a finite supply of most of these elements and once exhausted, are really difficult to replace with. Not just that, the extraction processes for these elements severely affects the environment and human life as well. Mining techniques like Open-Pit Mining, which are used to mine rare earth elements, deeply affects the environment around it, coupled with extremely poor working conditions for the workers, the dolorous picture of the issue becomes more apparent.

So, before you throw away your old smartphone for a new one, consider giving it away to charity or sending it to a recycling and element extraction plant. We will have to reclaim the treasures in our old phones to keep the production sustainable for the environment; recycling and reusing are our only options.

Language - A Human Concept

RITIK SHRIVASTAVA

The emergence of language was a defining moment in the evolution of modern humans. It was an innovation that changed radically the very character of the progress of the human society. Language exists as a very human concept in the minds of scientists and philosophers. Therefore, like any other concept, Language as well has multiple definitions,

According to Henry Sweet, "Language is the expression of ideas by means of speech-sounds combined into words. Words are combined into sentences, this combination answering to that of ideas into thoughts" or as Wikipedia defines it, "A language is a system of signs for encoding and decoding information".

While none of the aforesaid 'definitions' are accurate, neither of them is wrong, nor one is more accurate than the other, simply because it is an abstract concept and it is constantly evolving with time. To say that humans brought this concept to existence would be a long stretch as creatures before had been using their own set of sounds and symbols to communicate. Where studies show that creatures can develop complex communication patterns without the need of a hardened set of rules or as now commonly known as, grammar.

This difference between the human form of language and that of the animate form seemingly exists because the former form of communication came to being independently and this 'system of Language' grew with time in a barter format, the speaker spoke something and the listener understood.

Both the entities involved got a sense of reward through this exchange. Now this system evolved in multiple forms, regionally and culturally, much like humans, into what it is today.

Ancient form of Language

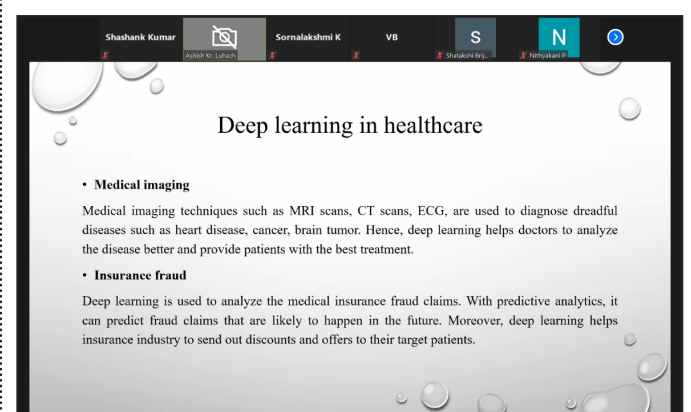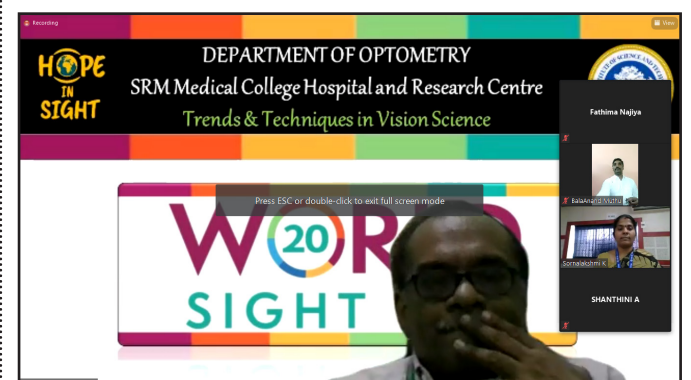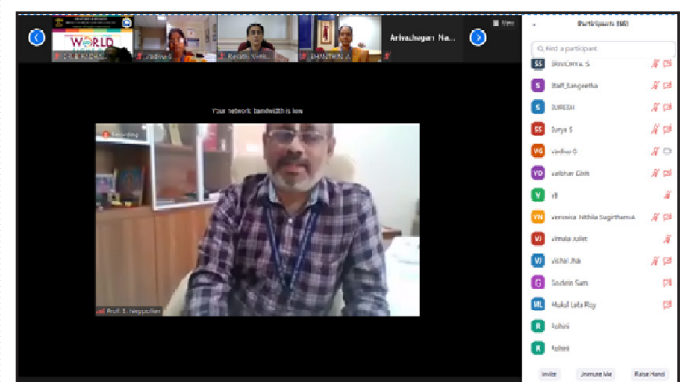# ICDCI: International conference on Deep Learning, Computing and Intelligence -2021

MAYANK JHA
SHASHANK KUMAR

The highly anticipated ICDCI-2021 event was conducted virtually by the department of Information Technology, SRM IST. It was organized as a part of SPARC funded project "Prognosis of Microaneurysm, and early diagnosis system for non-proliferative diabetic retinopathy using deep convolutional neural network". The paper submissions started on 31st October, 2020 and all the work of researchers finally came to fruition on 7th January, 2021, with the paper presentations. The event had in total 150 attendees including the committee members, paper presenters and the faculty members. Out of the 45 papers that were presented, 30 of it were written by SRM IST researchers and the rest by researchers from universities across the world including University of Nis, Pondicherry University and CMRIT.
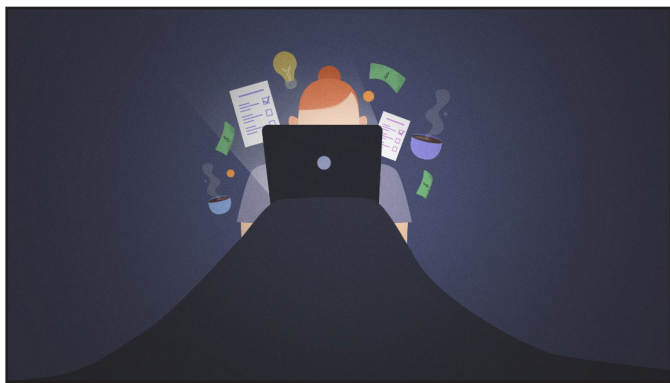
Dr. Ching-Hsien Hsu, Dr. Seifedine Kadry, Dr. Oscar Sanjuan Martinez and Dr. Ashish Kr. Luhach were the keynote speakers and 'Application of Deep Learning in Medical Image Processing' was one of the paramount topics. Each presenter first introduced the research papers followed by the presentation of slides with citations, graphs, models and finally the conclusion of their research based on which questions were asked and evaluated.

"A baby learns to crawl, walk and then run. We are in the crawling stage when it comes to applying Deep Learning", said Dr. Gunasekaran Hanogaran thus highlighting the importance and the need of further advancement in the field of DL and computing.

A slide from a research paper being presented on the topic of "Application of Deep learning in medical image processing".

A display of large amounts of work fueled by toxic habits

The toxicity of hustle culture

NANDITA
BHYRAVBHATLA

In recent years, 'hustle culture' has metamorphosed into a raging topic of criticism and conflict that has grabbed the limelight with gusto and aplomb. Hustle culture refers to a lifestyle of constant work and pivots around a need to gain control. It promotes the idea of maximum productivity and creates an imbalance between work life and personal life. Hustle culture is responsible for creating a toxic environment of robotic labour with disregard to personal satisfaction and mental health, that ultimately pressures people into working around the clock. It gives a false idea that in order to be successful, one must discard any thoughts of free time and unplanned enjoyment. The main demographic being influenced into following the trends of 'hustling' are young adults. Teenagers are being brainwashed into working minimum wage jobs at ages as young as 15 along with their school work. Adults are being criticized for having worked under 8 hours long and a failure to embark on the unrealistic expectations is labelled as being 'lazy'. This in turn can have a major negative impact on one's mental and physical health. Long hours of work can, and often do, lead to cases of anxiety and depression, especially in younger people. It is important for people to make spontaneous decisions and set aside time for leisure activities, friends, and family as it releases stress. Hustle culture is one of the many fast-growing cultures today that promotes toxic and destructive attitudes behind the illusion of success and happiness. It demerits the need for human satisfaction and comfort and replaces it with a false sense of euphoria and success, achieved via professional glory. The wafer-thin walls that embalm this toxic mannerism is one that is increasingly pervading into society.

ICARSES 2020

PRAKHAR BHARADWAJ
GAYATRI RAMYA
KOTHURI

SRMIST has been promoting clean, renewable energy ever since its establishment in 1985. This is one of the many reasons why our institution has moved up through international alliances and collaborative initiatives to achieve global excellence. To further strengthen our stance on renewable energy, The Department of Mechanical Engineering of our institution conducted ICARSES 2020 recently.

The Virtual International Conference on Advances in Renewable and Sustainable Energy Systems (ICARSES 2020) was convened by Dr M. Cheralathan Professor and Head, Department of Mechanical Engineering. The purpose of this conference was

to bring together researchers, engineers, manufacturers, practitioners and customers from all over the world to share and discuss advances and developments in renewable energy research and its applications with emphasis in the area of solar energy. The conference invited papers on a plethora of highly specialized subjects including but not limited to 'bio-energy and carbon capture', 'Nanofluid heat transfer' and 'Nano-enhanced phase change materials'. The conference also had a long list of renowned scientists who addressed the participants. Few distinguishable keynote speakers included Prof. Ruzhu Wang from Jiao Tong University, China and Prof. R. Velraj from Anna University, Chennai. The event was a huge success; researchers from all over the world submitted their papers on renewable energy sources increasing our capacity to solve present environmental issues and the ones in near future.

What if India Was Never Colonised by The British?

TYRA MINNAL VINAY

Let us head back to a time when the British hadn't yet ruined the structural integrity of how India, as a whole, functioned. When the British entered the scene, the Mughal empire—which had been the largest at the time—had lost its influence. The Maratha empire was also not under a strong powerhouse. The Sikh and the Mysore empires were flourishing; Bengal and Hyderabad were doing just alright. Basically, India was functioning like a machine but with all the parts on the outside and in separate rooms. Now the major obvious question to be asked is, would India even exist as one country? There is much contemplation. Many lean towards the fact that it would probably not exist, and we might look like the way Europe is right now. We would likely be divided into countries based on our cultures and languages, or based on political ideology influence. For example, after World War II (had the outcome of the war been the same), India would be divided into two parts with the north being influenced by the communist regime set up by the Soviet Union (which bordered China and central Asia) and the south would be under the influence of the allies. Ultimately, if the Indians as a whole didn't have one common enemy, we never would've have become India. And I think that can be agreed with wholeheartedly. So if India was never colonised by the British, which state/country/empire would all of us belong to in the modern world? Would we even be a democracy? Would there be a divide, like North Korea and South Korea? A lot of unanswered questions, but it definitely makes one wonder.

How do Korean Dramas Make a Mark Everywhere Despite the Language Barrier?

ADITHYA R

Hallyu, or the "Korean Wave", has often been associated with Korean dramas that have become a global sensation. However, the success of Korean dramas (popularly known as k-dramas) is defined by basic elements. The strong undercurrent of social and cultural aspects of Korea makes it an enriching experience for the foreign viewers, and contributes greatly to learning the language to expand the career opportunities in Korea; as done by SRM Institute of Science and Technology, where Korean is one of the major foreign languages. K-dramas often feature unique themes from various genres.

\The plot is based on a simple foundation which spans 16 to 20 episodes; further, the suspense looming at the end of each episode creates the interest to watch further episodes.

Korea's culture is largely influenced by Confucian practices, which stress on the importance of being a good human being. Korean actors use the drama as a platform to highlight the benefits of inculcating good values and handling unfavourable situations with confidence. Writers and directors have great insight into specific genres which provides valuable information for the viewers to encounter real world situations. For example, the term "Acq-hire" was used in a k-drama, which mentions the impact faced by a start-up that signs a contract with an established company without researching the hidden nuances. The fine blend of primary and secondary characters makes the drama more appealing to watch. The plot is directed in such a way the viewers are able to empathise with the characters and get emotionally involved. K-dramas are available on the

(From the left) Kim Do Wan, Bae Su Ji, Nam Joo Hyuk, Yoo Su Bin, and Stephanie Lee pose for a team photo in "Start Up", a k-drama.

internet for free, and English subtitles have been crucial for these dramas to become a global phenomenon.