GD GOENKA UNIVERSITY
FROM FOUNDATION TO FLIGHT

GD Goenka | School of
Engineering & Sciences

G-FLASH

MAGAZINE | YEAR-4, SPECIAL ISSUE

GD Goenka School of Engineering ranked as **2nd Top Emerging Institution by Times of India**

MESSAGE
FROM THE EDITORIAL BOARD

Hello Everyone,

Greetings from Editorial Board!

It gives us immense joy and satisfaction to present you all with special issue of G-Flash. We have endeavoured to put together an amalgamation of creativity and technology and hope you have a good time reading it. We are here to slide in a little sneak peak for our readers, providing a slight insight of what's inside. G-flash wi l be manifesting all the scientific and technical exchanges within the School of Engineering and Sciences, and also with other institutes, universities and reputed industries worldwide.

G-Flash includes all the highlights of the School activities. Amidst a busy schedule of our personal and professional life, we often tend to lose track of all other simpler things we are capable of, things that we could have been proud of, and things that bring us satisfaction. This magazine will become a paramount way for such students to showcase their technical and creative talent on a well-known platform.

Unfortunately, these are unprecedented times when the world is suffering from pandemic and every sector including education has been affected. However, educators and learners at GD Goenka University have come together with the help of technology to maintain unhindered education. It is noteworthy how education as well as various outreach activities have been carried out in spite of deviation from a normal schedule. It's time that we, the youth, thereby understand our role in strengthening our society in different ways. We are truly thankful to the ones who have contributed to this issue through providing creative ideas and by thinking out of the box, we really appreciate their support. We really wish to see this kind of enthusiasm every time.

Any suggestions and comments are heartily welcomed.

Editorial Board, G-Flash

Ratika Gandhi

Himanshi Yadav

Utsav Singh

Ankit Sain

Ankita Sindhu

Shankar Keshav Prasad

Arushi Nair

Rishav Sarkar

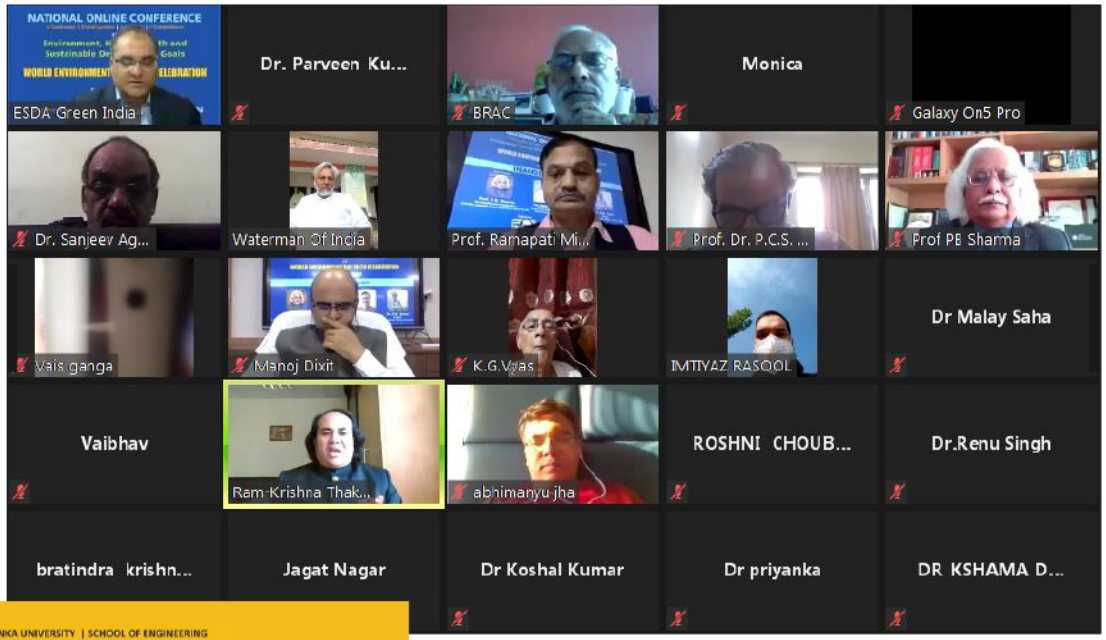
EDITORIAL BOARD

INSIDE THIS ISSUE

We would love to hear from you. Send your articles, questions, comments, feedback to: gflash@gdgoenka.ac.in

COVER STORY

Education during Pandemic



Education sector is the sector which is not confined to the boundaries of classrooms but extends into home, community and all around the world. Information is not bound in books only it is available everywhere. Education sector, which has always been placed for real-life, physical interaction, has been among the hardest hit during this pandemic situation of COVID-19. Considering this situation and conditions as hundreds of millions of students around the world struggle to study at home, it remains to be seen how educators and the sector on a whole are dealing with the new learn-at-home reality. As in adopting such practices, teachers are also playing an important role in engaging students and motivating them for studying with new learning techniques.

The pandemic has stimulated innovation within the education sector. We have seen innovative approaches in support of education and training continuity ranging over the web, radio, community radio, television and podcast, making e-learning a reality. Distance learning solutions were developed, thanks to quick responses by governments and partners all over the world supporting continuity of education. In areas with limited connectivity, governments have taken the initiative for the distance learning modalities, which is often a blend of educational television and radio programming, along with the distribution of print materials. In India, PM eVIDYA is one such initiative which brings together digital/online/on-

air education. SwayamPrabha TV Channels,DIKSHA (Digital Infrastructure for Knowledge Sharing), e-Pathshala web portal and mobile app, National Repository of Open Educational Resources (NROER) are some such platforms facilitating education in India during pandemic. UNICEF has taken an initiative to help about 1.6 billion children to continue with their education from home.

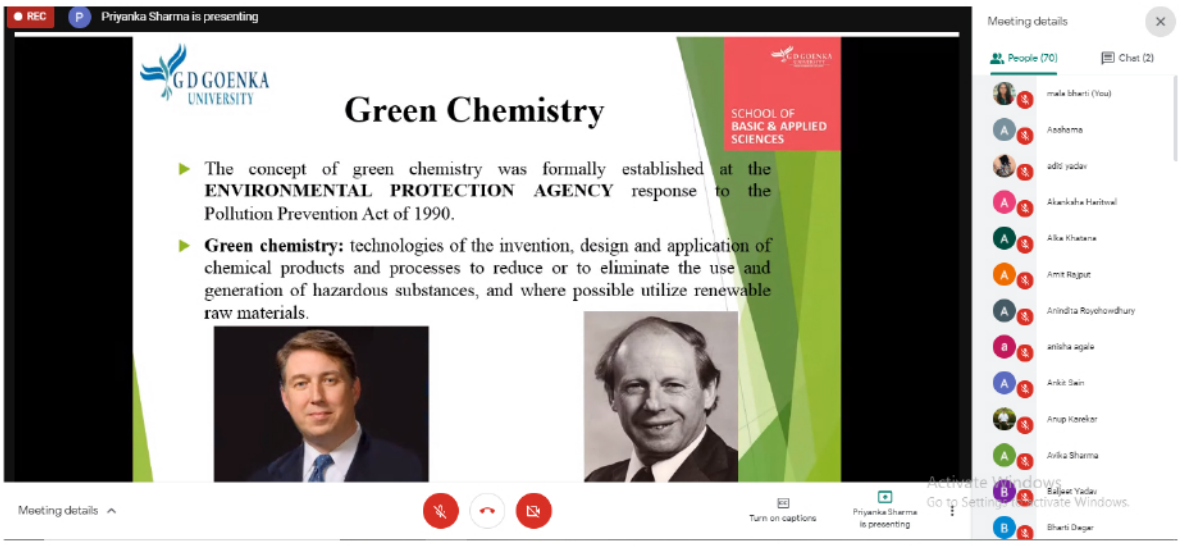
Some countries are developing tools and resources for learners with disabilities and their parents. This requires enhancing accessibility features, such as audio narration, sign language video, and simplified text, as well as provision of assistive devices and, in some cases, reasonable accommodation. For hearing impaired students, a DTH channel is being operated in sign language in India. Study material has been developed in Digitally Accessible Information System (DAISY) and in sign language for visually and hearing impaired students.

Since the onset of the pandemic, teachers were immediately tasked with implementing distance learning modalities, using the available resources. Web-based class meetings and messaging applications have become useful tools and new ways of communicating with the learners and the educators.

GD Goenka School of Engineering and Sciences also kept the flag of education flying high through different online forums. Beginning from orientation for a new academic year to online classrooms all were a part of the new normal education scenario here. Faculty webinar was also an important part of it. Renowned faculty members and scientists from reputed institutes of India and other countries as well conducted scientific sessions giving detailed insight into various aspects of science and engineering. Beyond this, international conferences, student development programmes, workshops and seminars were also organized by the School to ensure exposure to various sectors for students and faculty members remains unhindered even during the pandemic. An online Pre-placement interview was also organized in which industry experts and alumni were present. In this session, representatives were from Maruti, L&T, TCS, PepsiCo, Wellknown Polyester Ltd., Ernst & Young, Byjus and other such well known companies.

Beyond everyday's online classroom schedule, students were motivated to participate in various projects and competitions. SIH 2020 is World's Biggest Hackathon and Open Innovation model, an initiative by Ministry of HRD to provide students a platform to solve some of the pressing problems we face in our daily lives, and thus inculcate a culture of product innovation and a mind-set of problem solving. Startup-Force,Team Agrim and Team Fearless Fighters were shortlisted and Team Startup-Force won SIH 2020.

Education @ online was primarily facilitated over Google Meet, Zoom, GoToWebinar and numerous similar platforms were used to give hands-on experience of experiments using virtual lab portal . Today, with converging technologies like mobile, cloud, analytics, robotics, AI/ML, 4G/5G, and high-speed internet, it has become possible to test several innovative approaches for education during pandemic. Technology and online forums have played a major role in not only educating students according to syllabus but also to educate people about the pandemic and



measures that can be taken to control the spread of infection. Big data and artificial intelligence (AI) have helped facilitate COVID-19 preparedness and the tracking of people, and to prevent the spread of infection, in several countries. Tools such as migration maps, which use mobile phones, mobile payment applications, and social media to collect real-time data on the location of people have been used for the purpose. Though 'Education' underwent a paradigm shift due to the pandemic but still 'Education' has been able to maintain its objective of doing good for society at large.

Aarushi Nair, Ms. Sakshi Sharma, Dr. Anindita Roy Chowdhury

Reference Links:

https://pib.gov.in/PressReleasePage.aspx?PRID=1655697

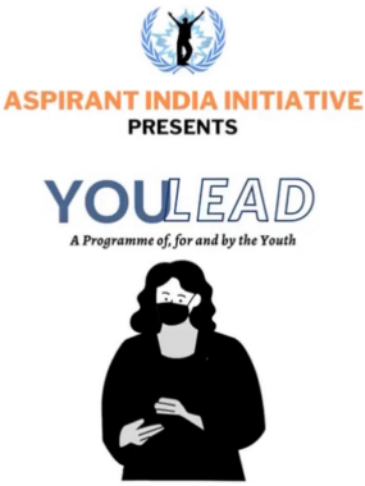
https://indiaeducationdiary.in/ministry-of-education-has-taken-several-initiatives-to-ensure-studies-of-school-going-children-during-covid-19-pandemic-education-minister/

https://www.unicef.org/coronavirus/keeping-worlds-children-learning-through-covid-19

https://www.pib.gov.in/PressReleseDetailm.aspx?PRID=1655697

https://newzhook.com/story/disabled-youth-covid-unicef-government-of-india-initiative-yuhwaah/

https://newzhook.com/story/inclusion-advocacy-awareness-pandemic-deaf-hard-of-hearing-hearing-impaired-disabled-nad-national-association-of-the-deaf-anuj-jain-islrtc-accessibility-coronavirus-education/



BEYOND ACADEMICS
SOCIAL OUTREACH PROGRAM

While the Indian society was going through COVID-19 pandemic, students of the School decided to play the role of 'Community Champion'. It is a most needed initiative, required to break free from the potential barriers present in our society. As COVID-19 amended the plans of students to study and enjoy at college campus, they kicked off with their own ideas about the lockdown. Students must have felt concerned towards the needy during the unprecedented situation.

While keeping themselves safe inside their premises, they helped many individuals who needed support during the lockdown. They reached out to them by providing daily food necessities as well as cooked food, thus, supporting the destitute families. While doing so, they also took substantial precautions and encouraged others to follow certain measures to make sure of overall hygienic conditions. They insisted on wearing face masks, head covers and gloves and also suggested to maintain a strict social distance among all.

Mohit from B.Sc. Microbiology, Pankaj Gupta from B.Sc. Chemistry, Mohini Raghav from B.Sc. Chemistry and Kanchan from B.Sc. Microbiology came forward and volunteered for this great initiative. Doing community service is a great way to improve our community; this also helped them gain social skills, they became more self- motivated and independent. Indeed, such kind of volunteering helps strengthen the society and encourages the youth to become a social body and help the needy people.

Adarsh Kumar Singh from B.Tech (Mechanical Engineering) worked with his own organization 'Aspirant India Initiative and volunteered a great initiative. During the difficult time, Aspirant India Initiative had tried to help out the society by constantly contributing with the help of different campaigns, which includes Feed My city Campaign in support with KVN foundation, Acid Attack Survivors campaign in collaboration with Saahas foundation, Diversipride campaign in collaboration with Jaipur Pride.

Ratika Gandhi and Himanshi, B. Sc. (H) Chemistry, Ankit, B. Sc. PCM

STUDENT ACHIEVEMENTS

PROJECT PRESENTATION

AT PHYSICAL RESEARCH LABORATORY, AHMEDABAD

Physical Research Laboratory (PRL), Ahmedabad, organized a program VISION 2019 (Vikram Sarabhai Innovation Competition) on the occasion of 100th birth anniversary of Dr. Vikram Sarabhai. VISION 2019 competition invited original ideas that had potential for new innovations. A Project titled 'Spectro-imaging Camera' by Monika Verma and Puneet Kumar of B.Sc. (H) Physics 4th Semester under the supervision of Dr. Mainak Basu from the Department of Physics was selected for presentation in PRL on 29 May 2019.

TECH ARTICLE

Kanchan and Ekta, B. Sc. (H) Microbiology Batch 2018-2021

Fruit Peel Magic Cleaner, is a natural alternative to the chemical cleaners. It is a kind of organic solution produced by fermentation of natural products that are majorly collected as part of biodegradable waste from households. It showcases the concepts of reuse and recycle, mainly the significance of organic products. Chemicals are rather harmful for humans if used as a cleansing solution. That is why Magic Fruit Cleaner has an advantage over cleansers having chemical compositions.

Magic Fruit cleaner is a bioenzyme cleaner, which uses the good bacteria to digest wastes, soils, stains and bad odour. The mode of action is bacterias produce enzymes specifically designed to break down certain molecules into smaller pieces. It indeed is a miraculous solution according to thousands of consumers. It is also really easy to make, so anyone can make it at home themselves. By using this magical and multipurpose solution, we can take care of the environment as well as our health. There is an urgent need to move towards natural and sustainable living, that is why Kanchan and Ekta from Microbiology discipline came up with this project with the help of their mentor and guide.

The reaction procedure of Magic Fruit Cleaner makes it extremely environment friendly, as the end product is water and carbon dioxide. It can be used for several purposes, i.e. surface cleaner, restroom cleaner, odour eliminator and many more. It is especially good for use in restrooms because it can eliminate mal-odours and can easily penetrate into grouted surfaces to remove soil that has worked their way into the grout.

Both of the participants were provided with the opportunity to demonstrate the project in front of eminent people of science and technical domain at National Bal Bhawan, New Delhi. It was a great experience for them, as they developed technical skills and served a social purpose, too by mentoring Govt. School students on their respective projects as well. They also won special cash prize of 5000 INR.

Kanchan and Ekta, B. Sc. (H) Microbiology

Dr. Gaurav Gupta

IN CONVERSATION WITH...

The 2nd Annual Research Conclave organized by School of Engineering .. introduced us to Dr. Gaurav Gupta who was present to give his insights on the research possibilities and opportunities in digital forensics. Dr. Gaurav Gupta is Additional Director/ Scientist 'E' at Ministry of Electronics and Information Technology. He was the first in the country to be awarded Ph.D. in the area of Digital Forensics on the topic 'Study on Digital Forensics for Detection of Computer Frauds and Cyber Crimes' by the Department of Computer Science and Engineering, Jadavpur University, Kolkata in 2009. He has more than 18 years of research experience in the field of Digital Forensics and is an expert in detecting computer frauds and cyber crimes. He has been awarded ISCA Young Scientist Award by the then President of India, Dr. A P J Abdul Kalam in 2010 for his work in Digitized Document Fraud Detection. In this edition of 'In conversation with', we ask Dr. Gaurav Gupta questions revolving around forensic science, education system, growth of technology and so on. Here's what he had to say:

1. How do new discoveries influence a forensic scientist?

A) Before the DNA (which was discovered in the 1950s), hair and blood samples had no value in the crime scene. New discoveries give new meaning to evidences and hence enables us to develop new solutions to old problems. Technology also changes at a frightening rate and advances in technology come for convenience and convenience comes from convergence. For example, in 2001, if you went on a holiday, you would have to carry a camera, map, ipod, phone, diary etc., today all you need is your phone.

2. Did you always want to be involved with digital forensic or was it something you discovered along the way?

A) That is quite an interesting question as I am a person who always likes to do something that people find challenging and normally avoid; I discovered that it is the best place since there is less competition there. In challenging fields, even a small research becomes a big breakthrough.

3. What do you think the structure of education is lacking in India?

A) We lack the objectives and we do not think enough on why we are doing, what we are doing. I think the objectives of education is empowerment as it gives us the tools necessary to do what one wants to do. Once we fix that, we will do well in any field.

4. Do you think the growth of technology should be moderated?

A) I believe that the growth of technology cannot be moderated. Its like the waves of the ocean. We cannot and should not stop it but go along with it and harness it. We should always be prepared.

5. Finally, how do you think one should foray into the field of forensic science and what do you look for in students when you recruit them?

A) One could do higher studies like M.Tech, Ph.D. or get certifications. What people need to do is find a problem, solve it and publish a research paper on it. The forensic field lack manpower and even small breakthroughs are largely appreciated. Also, students need to have an aptitude to learn independently and should not expect to be spoon-fed. We want students who are ready to invest at least a year with us, as it will result in better learning experience for them.

Q.1 Dr. Nalini Chhetri, thank you for accepting this invitation from our Magazine, G-Flash! Can you please tell our readers about your background?

Hello and Thank you for inviting me to "talk" to you. I am with the School for the Future of Innovation in Society and School of Sustainability in the College of Global Futures in Arizona State University in the US. Academically I have an interdisciplinary background with an undergraduate and Master's degree in biological sciences from West Bengal, India and my dual PhD degree in educational policy as well as comparative and international education and minor in Demography from the USA. My post doc was in climate science. I have lived and studied in India, Nepal, Malaysia, Hong Kong, Singapore, and now for over 16 years in the USA.

I have worked as a consultant for European and American international bilateral agencies. I bring the experiences of my professional career into my current teaching and practice.

Q.2 We were happy to have you with us for the Two-Day International Conference and Workshop on Sustainable Cities and Communities (ICSCC-2020) in association with Arizona State University, USA and GD Goenka University, India held at GD Goenka University campus from 7- 8 February, 2020. How was your experience with the programme at our campus?

My team members from ASU were highly impressed by the professionalism and collegiality of the faculty and leadership at GD Goenka. The way the conference was conducted was on par with any world class international event. Congratulations! We had worked for over a year and collaborated with multiple faculty and it was extraordinary to have that kind of collaboration and frank discussion. We were impressed with the event, the caliber of the speakers, the organizers, students and the leadership. The faculty are world class in GD Goenka. We saw discipline, commitment to high standards as well as an eagerness to collaborate.

We were also very thankful for the wonderful hospitality, graciousness and hard work shown by everyone involved.

Q.3 How could sciences and engineering graduates be made more socially responsible?

We believe that the underlying mission of science and engineering is in the service of society. In the way we teach it is always assumed the science and technology will be used for good. And that is true to a large extent. Innovations and technologies have benefited the more well-off amongst us while significant part of our population still live in abject poverty. We need to focus to improve our curriculum so that we produce more empathetic and interdisciplinary thinking engineers and scientists and innovators who think of people first.

I am providing a link to a short acceptance speech of deputy director in Science and Technology Office in the new Biden administration that could best capture why science has to be more socially responsible.

https://abcnews.go.com/US/video/biden-picks-alondra-nelson-deputy-science-policy-chief-75299191

Q.4 You have almost three decades of international experience in South & South-east Asia, West Africa and Latin America. What is your advice to our young readers who aspire to be in the domain of science and technology tomorrow?

First and foremost - thank you for being in science and technology. It means that you are gifted and love science. It may also mean you want to have a career in this field and hope to do well for yourself and your family and all those are important and valid aspirations. I have no doubt that your readers will become scientists and engineers of the future, so my warm wishes to them. Less than 5% of the world population have a degree in science and technology, so, with this knowledge comes some responsibility. The world needs better scientists and better engineers, especially those who want to pursue these disciplines with humility and empathy. Learning has to keep happening inside and outside our classroom, all throughout our careers and life. We must learn to take risks – if the smartest cannot do it then who will.

Thank you so much.


Dr. Nalini Chhetri

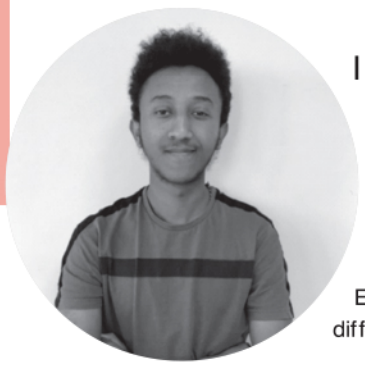
PLACEMENT RECORD
YEAR SCENARIO

Since March 2020, the world is unfortunately going through a pandemic. And this has affected people widely. In spite of such extraordinary circumstances, our recruiting patrons continued to have faith in GD Goenka University and our students. Over 55 companies visited the campus for hiring students of the School of Engineering and Sciences. The placement scenario witnessed the significant growth in the number of students placed in the top-notch companies with 96% of the total placements of SoES with highest CTC of 10 lakhs per annum while few others invited students for direct application for open position. The skill set and talent acquired by the students helped them to receive lucrative offers and roles in the area of research, analytics, technological services, etc. from companies like EY, GreyOrange, TCS, Wipro, JBL Group, Escorts, BYJU's, Padmini, etc. Apart from campus placements, our students got placed in central government sectors such as the Central Water Commission as well.

The vision of the School is to bridge the gap between industries and academia by upgrading the curriculum as per the industrial standards which can be seen with the rave review of students given by the industrial experts.

Mikeal and Arudra

B.Tech (Batch 2018-2022)



I am originally from Ethiopia, also known as the Horn of Africa. According to me, India and Ethiopia are quite similar as they both are countries with great history and diverse culture. Ethiopia is home to almost 80 different cultures.

I moved to India in July 2019 to undertake B.Tech. program at GDGU and have been living with my father since then. I try to help my father with daily chores and keep up with my academics at the same time. Moving here has made me self-reliant and given me a sense of independence.

As you can guess, being away from home makes me miss my family and friends but most of all, it makes me miss the home cooked foodlike 'Injera', which is like 'roti' but made with 'Teff', a grain which is indigenous to Ethiopia.

Selecting the University I would be studying at was a hard and critical decision I had to make. A friend recommended GD Goenka University to me and after careful consideration I was clear that GDGU has more to offer than any other university. The education system in India is slightly different from the one in Ethiopia, for example, the examination process is harder in Ethiopia but the curriculum is harder in India.

College life has just begun for me, so there are not any major differences in the effort and the time I spend on college related work compared to high school work. I look forward to great adventures and experiences in the coming years of my life at GDGU.

I am an Indian who lived in Holland for 3 years and completed my 12th grade from there.

The education system of Holland is completely different from India. From the teachers to administration, management to accountability, it's a completely different routine and approach. There is a lesser inter-person connection between the students and the teachers and the system promotes a lot of independent studying.

There are positives and negatives when it comes to cultural differences. The pros about life in India is the level of concern people have for each other. In India more number of people would check on you, whereas in Holland its more of an isolated living condition.

One of the things I miss about Holland, are the small distances, which can be covered on a bicycle. I never used a car back then, I would just bike around the city which would be a great source of entertainment and exercise. I also really miss the cold winter season of Holland.

My dad's friend suggested the university and I chose it as I liked the course they were offering. I like the infrastructure and campus of GDGU.

I stay at the college hostel so, I basically stay on-campus all the time. I like the hospitality, comfort and grand infrastructure of our hostel buildings and so far, I am enjoying life here at GDGU.

Vishal Bhardwaj
B.Sc. Mathematics (2016-2019)

I've always dreamt to be a Mathematician one day, so I decided to enroll into Mathematics Program back in 2016. The beautiful thing about GD Goenka University was that I could explore Mathematics through various co-curricular activities like Guest lecture, Seminars, Workshops and I was able to meet many experienced people of my field, which really helped me grow as a professional. I always wanted to go beyond academics and during my graduation, I realized that the advanced knowledge of research comes into existence when we give academics more time and practice and that is exactly what I did to fulfill my dreams. At GD Goenka University, I have seen the best faculty members who provide us with in-depth knowledge with their experience. The faculty, the staff as well as my fellow students had always been so helpful and kind towards me.

During my internship at IIT Guwahati I worked on "Understanding the existence and Uniqueness of various numerical techniques". My other projects titled "Industrial input panel for blind operators" and "Seasonal variation with respect to water quality index of Ghagge River" gave me knowledge and confidence to pursue in the domain of mathematics.

During my time at GD Goenka University, I did what I wanted to do and made the most out of it. I enjoyed the process of becoming a better person as an individual and a professional. I would like to say that everyone has a different personality and goal, everyone has got a different story; so just be attentive, kind and curious towards your goals. Ask your own questions, look for your own examples, and discover your own proofs. There might be too many things you would want to change, so be the change! If you ever come across any difficulty either academically or personally, know 'Discipline' is the key.

"There are n+1 ways to solve any problem. You would've tried n ways,

But 1 way is still there bound to be found."

We recently got the opportunity to talk to one of our star alumni, Pranav Suri and discuss with him about the various exciting things he is doing after graduation, one of which is being involved with a start-up. Here is what Pranav had to share with us.

Back in 2017, I received a call from Dr. Capt (R) Himanshu Pasbola who I had met when I was looking for an internship during my sophomore year. Our conversation revolved around creating an online-venture that will make it easier for people to buy products, particularly electronics. At this point, I was not involved with the team, who already were doing customer study and market research.

It was at the beginning of 2018 that I joined the company officially and supported the work that was going on.

Overall, whenever there would be a new product in the market, it will rank the product on our engine much like how Google ranks web pages. The whole interface is based around a chatbot and web-UI. The revenue model seems to be promising. We are currently looking to extend the product to more categories like mobile phones, laptops, washing machines etc.

We are yet to name our company as the previously decided name "Choice" was not available.

Pranav Suri
B.Tech (CSE) Batch 2015-2019

For our annual family trip, we decided to go to Interlaken, Switzerland. Since the city is in between two lakes (Lake Thun and Lake Brienz) it gets the name Inter - Laken.

We reached Zurich airport around 12pm and drove towards Interlaken. I had always heard of the scenic beauty of Switzerland but the drive to the city through the mountains was truly spectacular. We checked in to our hotel, Hotel Bellevue. Our hotel was located on the riverfront of the river Aare. It was fortunate that our rooms were facing the river and the mountain scape was breathtaking. We were there for 2 days and 2 nights. Day one was reserved for city exploration along with visits to supermarkets. We paid a visit to the famous Yash Chopra statue in front of the Interlaken Casino. It was interesting to note that Bollywood has a major impact.

The next day we had lunch at a small restaurant, Cafe de Paris. We met an Indian cook there, who made complementary King Prawns with a twist for us (definitely would recommend the pasta there).After lunch, we took a train ride to Jungfrau; the Top of Europe. It's an ice capped mountain and the view from there was mesmerizing. Next day early morning, we were on our way back to the airport. In this short trip of mine I would say, Switzerland is a peaceful, beautiful and picturesque country. A perfect place for some escape from the real world.

Aarushi Nair (B.Tech CSE)

ACTIVITIES

Rent a kayak or stand-up paddleboard for Lake Thun or Brienz.

The drops that encircle Interlaken's lakes are a launch pad for Paragliders.

Visit souvenirs shops

LOCAL FOOD TO ENJOY

Meringues with cream

Pflümlischumli

Rustic tea

King Prawns

PLACES TO EAT

Café de Paris

Ox

El Azteca

Trekking in the Himalayas

Department of Basic and Applied Sciences (SOES)

Learning is never complete until we expand our own boundaries and explore the extremes. Learning has no walls and therefore cannot be confined into. The hardships, the challenges faced in real world teach the lessons that we inculcate in us with only experiences.

This is about a similar experience out in the himalayas in extreme weather conditions, far from the warmth of our homes. The trek started from Sankhri, small village in Uttarakhand, on 24 December 2019, the path included rocky and snowy trails into the alpine forest. The glimpse that we got throughout the trail was just out of any wallpaper: the far away white mountains overlooking us as we climbed higher and higher. It was four day summit trek. We spent our nights in tents pitched on knee deep snow at around minus 10 degrees.

Second day was a short trek in between the snow and the pine trees, for about only 3 hours to Kedarkantha base camp, from where we could see our summit, the Kedarkantha peak alluring us, standing upright at 12,500 ft.

The third day we started our climb to the summit around 3 am, the trekkers, each carrying a torch light, queued up. It seemed like a line of lights spiraling into the darkness. The stars glittering up in the sky and only the foot of the trekker at the front, was the only thing visible in the dark, we climbed on. As we climbed higher, the breaths began to grow shorter and heavier, but the white Kedarkantha peak, glittering in the dark, kept going up. Few fellow trekkers puked, slowed down but we gradually kept on going taking one step at a time climbing at almost 60 degrees inclination. Finally, we reached the summit before dawn, all waiting to see the first rays of the sun piercing the white horizon from behind the mountain peaks. Then it was, the golden rays piercing the darkness away with the most breathtaking view I have ever come across. The moment was worthy of all the hardships, breathlessness and the freezing weather conditions. We could see all the peaks such as Swargrohini, Banderpunch, Black peak, Har ki Doon valley, Rupin glacier. all around at 360 degrees, with the whole world at our feet. After relishing the breathtaking view, we slid down the snowy slopes with memories of a lifetime.

Dr. Soumita Talukdar, Assistant Professor

DEAN'S LIST FOR ACADEMIC YEAR 2019

170020209002
Monika
B.Sc.(Phy)
2017-20
9.08

180020217002
Parul Verma
B.Sc(H) Biochem
2018-21
9.31

180020213006
Shaurya Singh
B.Sc.IT
2018-21
9.57

180020211001
Bharat Bhushan
B.Sc(Math)
2018-21
9.73

190020212004
Deepanshu Guliar
BCA
2019-22
9.38

180020210006
Shaikh Farhaaz Javed
B.Sc.(Chem)
2018-21
9.89

180020208003
Jasleen Kaur
B.Sc.(FSC)
2018-21
9.96

180020216014
Alka Khatana
B.Sc.(Microbio)
2018-21
9.74

180020206001
Kamlesh Prasad
B.Tech (CHE)
2018-22
9.42

170020002001
Sandeep
DEEE
2017-20
9.38

190020205001
Mudit Maheshwari
BT(EEE)
2019-23
9.26

170020203043
Varsha
B.Tech CSE
2017-21
9.98

170020204005
Shaina Mittal
B.Tech ECE
2017-21
9.5

170020201012
Shubham Yadav
B.Tech ME
2017-21
9.24

180020309004
Pelumi Abimbola
M.SC(BD)
2018-22
9.80

180020001005
Nikunj Dutt
DCSE
2018-21
9.77

180020307001
Amit
MCA
2018-21
9.14

190020004004
Shashank Narayan Ray
Diploma CivE
2019-22
9.16

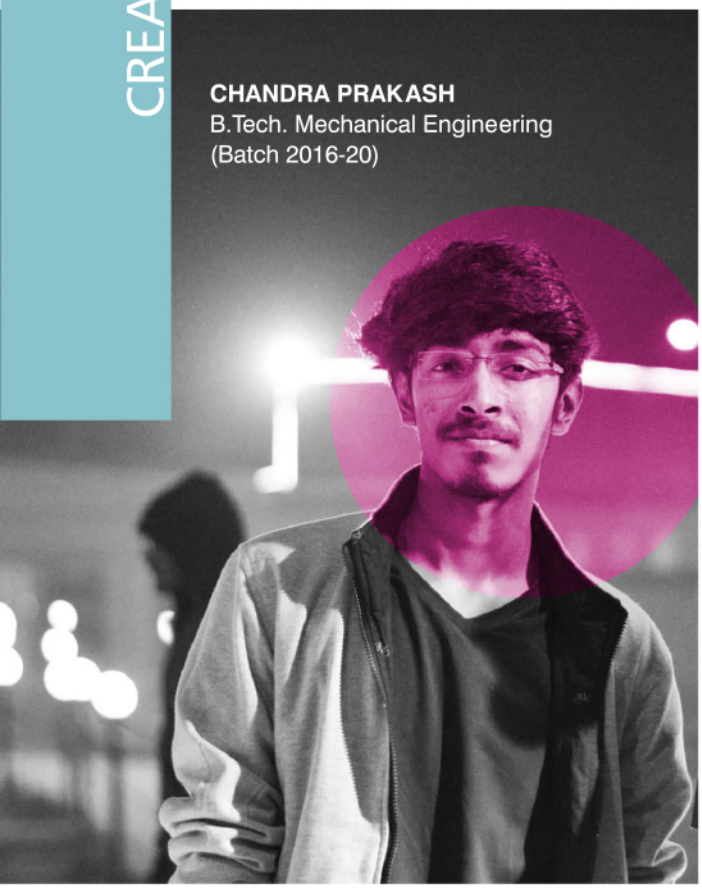
190130306001
Aarushi Bhardwaj
M.Sc. Microbioblogy
2019-21
9.48

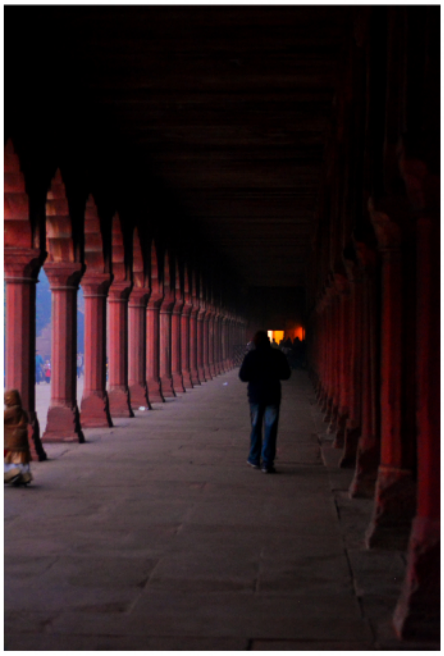
180020312002
Deepika
M.Sc.(Che)
2018-20
10

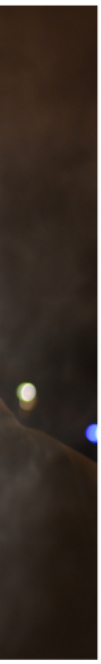
190130308002
Insha Yousuf
M.Sc.(FSC)
2019-21
9.72

We have all heard that a picture speaks a thousand words but more than that, a picture tells a story. Sometimes these stories are worth seeing and hearing about. For me, photography is an escape from my daily routine and it helps me in getting another perspective in life.

CHANDRA PRAKASH
B.Tech. Mechanical Engineering
(Batch 2016-20)







Painting is one of my favorite things to do whenever I am free. I love different shades of colours and find painting therapeutic. My mind is refreshed every time I paint and feel rejuvenated to do the next activity.

Kritika Verma
M.Sc Microbiology

Oracle Cloud Day

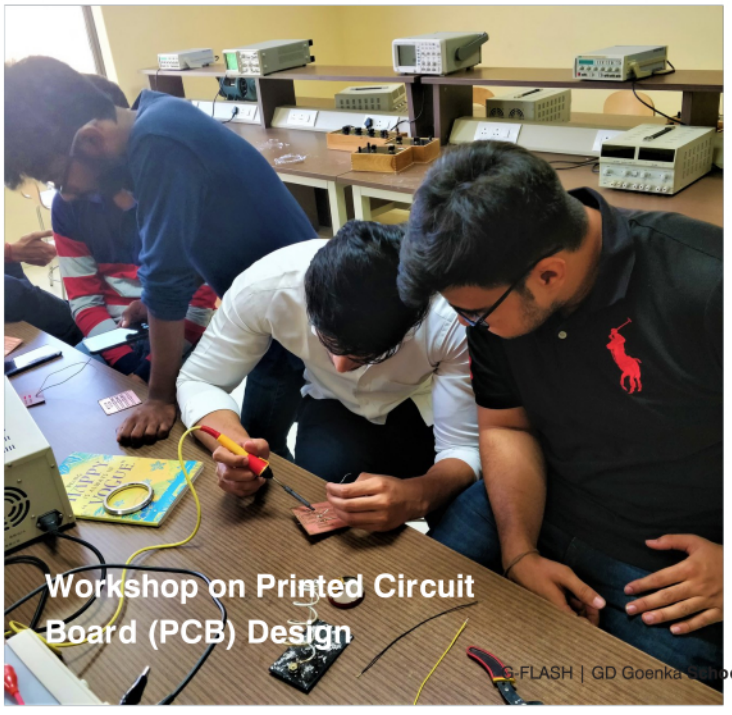
JavaScript 101: Workshop by Coders Club

SOE wins BEST SCHOOL AWARD at GDGU INTRA MUN 2020


Techknow Conclave on
Latest Engineering
Tools and Equipment


SEMINARS
Technical Profile Building


Open Source and

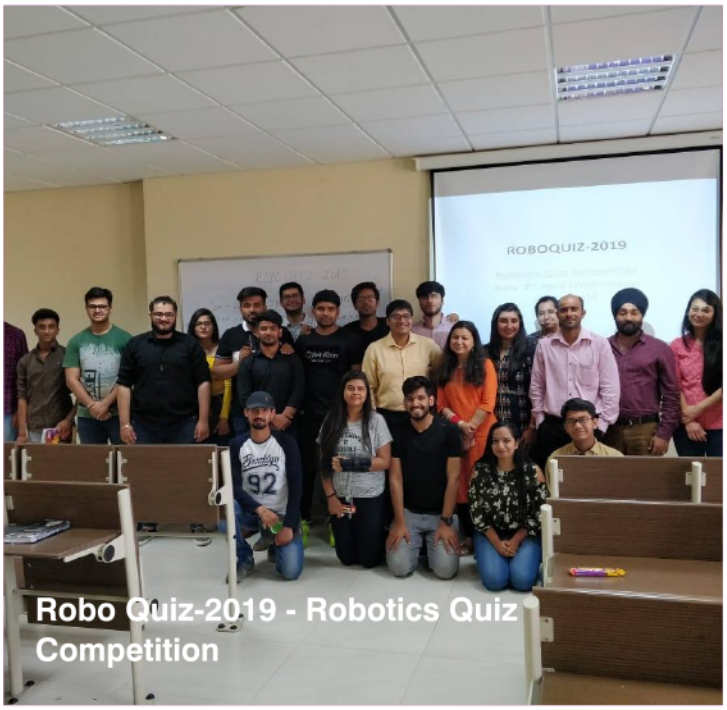

Workshop on Printed Circuit
Board (PCB) Design


Workshop on MATLAB

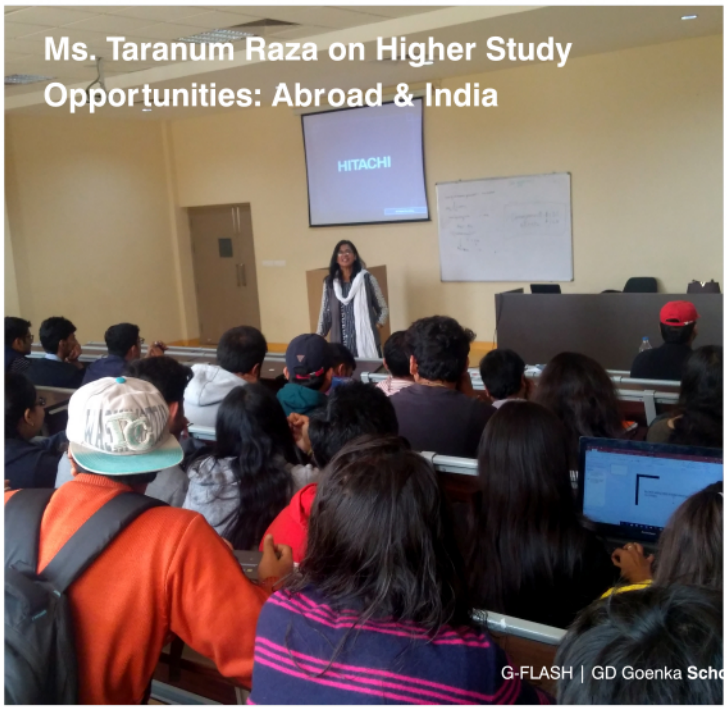
Challenges and Opportunities from Operation Research Perspective by Dr. Rene Villalobos

5S Principle of Lean Manufacturing by Mr. Harbhajan Singh

Significance of Mobility by Dr. Ishan Ranjan



Robo Quiz-2019 - Robotics Quiz Competition



Ms. Taranum Raza on Higher Study Opportunities: Abroad & India

Prof. (Dr.) Virendra Kumar Vijay on Gram Urja Swaraj Bioenergy: A Sustainable and Reliable Energy Source

Visit to Anveshana - Science and Engineering Fair 2019

Visit to PathKind Labs (National Reference Laboratory)

Industrial visit to Food Safety and Standards Authority of India (FSSAI), FDABhawan, Delhi

Visit to Indian Institute of Technology, Delhi

Visit to Sanskriti University, Chhata, Mathura

Visit to Kimia Biosciences Ltd.

Visit to Mother Dairy, Patparganj

Workshop on Image Processing using Open CV

Workshop on Block Chain Technology

Workshop on Humanoid Walking Robot Development

Workshop on Application Programmers Interface (APIs) using asynchronous programming on the Node.js platform.

Nodal Center for Virtual Labs

GDGU @ KENNEDY SPACE CENTRE

Mayank Sehdev, B.Tech Mechanical Engineering

Mayank Sehdev final year student of B.Tech Mechanical Engineering of the Schoolwas invited to judge the CONRAD Innovation Summit 2019 in Kennedy's Space Centre Florida. He was the only one to represent India in the panel of judges in Energy Domain, He was the youngest judge and shared the panel with NASA's ex scientists and officers from American Navy.CONRAD challenge givesstudents between the ages of 13-18 the chance to become entrepreneurs and apply innovation, science and technology to solve problems with global impact. Guided by teachers and industry experts, the competition becomes a master class in collaboration, creativity, critical thinking and communication. The result: students develop skills needed to thrive in the 21st century workforce and bring to life commercially-viable innovations that have the potential to change life for the better on the individual, national and global levels. It's an innovation competition that is creating the next generation of entrepreneurs who are going to change the world.

NASA-JOHN F. KENNEDY SPACE CENTER

Prediction of tensile behavior of FS welded AA7039 using machine learning', Materials Today Communications Elsvier,(Verma S., Misra JP, Singh J., Batra U., Kumar Y.,2020)

An ensemble algorithm for breast cancer histopathology image classification',Journal of Statistics and Management Systems, 23(7).(Kumar, D., & Batra, U., 2020),pp.1187-1198.

IPFS enabled blockchain for smart cities', International Journal of Information Technology,(Tiwari, A., & Batra, U., 2020),pp.1-11.

EEG signal analysis and detection of stress using classification techniques, Journal of Information and Optimization Sciences, 41(1). (Sharma, R., and Chopra, K., 2020), pp. 229-238.

Sequential Model for Digital Image Contrast Enhancement', Recent Patents on Computer Science, (M. Agarwal., G. Rani.,and S. Agrawal., 2020)

Effect of process parameters on temperature and force distribution during friction stir welding of armor-marine grade aluminum alloy', Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, (Verma, S., & Misra, J. P, 2020)

Prediction of tensile behavior of FS welded AA7039 using machine learning', Materials Today Communications Elsvier,(Verma S., Misra JP, Singh J., Batra U., Kumar Y.,2020)

Modeling of friction stir welding of aviation grade aluminium alloy using machine learning approaches', International Journal of Modelling and Simulation,(Verma, S., Misra, JP, Popli, D.,2020)

Artificial Neural Network Models for the Prediction of Metal Removal Rate in Rotary Ultrasonic Machining',In Advances in Intelligent Manufacturing,(Popli, D., Sharma, P., & Verma, S., 2020) ,pp. 115-132.

QoS Optimization in Internet of Medical Things for Sustainable Management chapter in Studies in Systems, Decision and Control, Vol. 311, Aboul Ella Hassanien et al: COGNITIVE INTERNET OF MEDICAL THINGS FOR SMART HEALTHCARE, 978-3-030-55832-1, 496878_1_En (10)

Prediction of tensile behavior of FS welded AA7039 using machine learning', Materials Today Communications Elsvier,(Verma S., Misra JP, Singh J., Batra U., Kumar Y.,2020)

Prediction of tensile behavior of FS welded AA7039 using machine learning', Materials Today Communications Elsvier,(Verma S., Misra JP, Singh J., Batra U., Kumar Y.,2020)

The Estimation of Risk on Cloud Computing Framework' , International Journal Of Innovative Science Modern Engineering (IJISME), Volume-6 Issue-4.(R,Priya.,2020) Pg.05-10.

SVM &GA-clustering based feature selection approach for breast cancer detection', International Journal on Soft Computing, Artificial Intelligence and Applications (IJSCAI), (Rashmi, Priya., and Rizvi.,November 2020)

Correlation among Hydrophobic Aromatic and Aliphatic Residues in the Six Enzyme Classes, International Journal of Computational Biology and Drug Design, September 2020

Mathematical modeling and behavioral analysis of a washing unit in paper mill, International Journal of System Assurance Engineering and Management: Vol 10, Issue 2, (pp 1639-1645)

Hybrid genetic and particle swarm algorithm: redundancy allocation problem, International Journal of System Assurance Engineering and Management, (pp 127)

ANFIS based Machine Repair Model with Control Policies and Working Vacation, International Journal of Mathematical, Engineering and Management Sciences, Vol 4, Issue 6, pp 1522-1533.

Existence Results for a Class of Impulsive Neutral Fractional Stochastic Integro-Differential Systems with State Dependent Delay, Stochastic Analysis and Applications, Vol 37, Issue 5, pp 865-892.(Chaudhary, R and Pandey, D. N.)

Sustainable Crop Production and Improvement through Bio-prospecting of Fungi, Fungi bio-prospects in sustainable agriculture, environment and nano-technology, Chapter 16, Elsevier, pp 407-428 (Haris, M, Shakeel A, Ansari SJ, Hussain, T, Khan, AB, and Dhanker R)

Bioprocess for Algal biofuel production, Bioprocessing for Biofuel Production, Chapter 4, Springer, pp 81-94. (Dhanker Raunak and Tiwari, A.)

Advances in Fungi: Rejuvenation of Polluted sites, Fungi bio-prospects in sustainable agriculture, environment and nano-technology, Elsevier, Chapter 12, pp 251-275. (Dhanker Raunak, Tyagi P, Kamble, SS, Gupta Diskhi and Hussain T.)

Advances in Fungi: Rejuvenation of Polluted sites, Fungi bio-prospects in sustainable agriculture, environment and nano-technology, Elsevier, Chapter 12, pp 251-275. (Dhanker Raunak, Tyagi P, Kamble, SS, Gupta Diskhi and Hussain T.)

Advances in Fungi: Rejuvenation of Polluted sites, Fungi bio-prospects in sustainable agriculture, environment and nano-technology, Elsevier, Chapter 12, pp 251-275. (Dhanker Raunak, Tyagi P, Kamble, SS, Gupta Diskhi and Hussain T.)

Constructed Wetland: A Green Technology for Wastewater Treatment, Environmental Microbiology and Biotechnology, Springer, Chapter 15, pp 335-363. (Choudhary, A. K. and Kumar, P.)

Approximation of Solution to Second Order Impulsive Differential Equation with Finite Delay, Dynamics of Continuous, Discrete and Impulsive Systems Series B: Applications and Algorithm, 27, I, pp 223-243. (Chaudhary, R. Malik, M. and Pandey, D. N. May 2020)

Supernova Type Ia Diversity: A Study using DBSCAN Algorithm, IJATCSE, (Neha Malik, Vivek Jaglan, Meenu Vijrania, Nidhi Arora & Shashikant Gupta) accepted June 2020

AOX mitigation in pulp bleaching effluents using Elemental chlorine free bleaching. Rasayan Journal of Chemistry, 13, pp 1262-1270 (Kumar, P., Kumar, S and Bhardwaj, N. K. June 2020)

Investigating the carotenogenesis Process in Papaya Fruits during Maturity ad Ripening by Non Destructive Spectroscopic Probes. Analytical letters, (2020), 18 (Tripathi, A., Baran, C., Singh, R. and Uttaml, K. N; June 2020)

Blockchain Architecture for Security Applications and Current Research. TEST Engineering & Management, 83, pp 18384-18394 (Hari, P. B.; Raghav, Singh, N. K., Garg, D. and Singh, N. May 2020)

Assessment of Delhi NCR Traffic Using Queuing Model. International Journal of Advanced Science and Technology, 29, pp 5418-5424 (Mittal, H. and Sharma, N. April 2020)

Scientific Numerical Pattern In Stringed-Fretted Musical Instrument. Mathematical Journal for Interdisciplinary Sciences, 8, pp 69-74 (Roy Chowdhury, A. and Sharma, N. February 2020)

Molecular dynamics simulations to study the interaction between carbon nanotube and calmodulin protein. Material Today: Proceedings, 28, pp 108-111 (Mehta, D., Negi, S. and Ganesh, R. February 2020)

Exploring the charge configuration of an armchair single walled carbon nanotube for drug delivery. Material Today: Proceedings, 28, pp 185-187 (Garg, K. and Negi, S. February 2020)

Valence tautomerism and delocalization in transition metal complexes of o-aminophenolates and other redox-active ligands. Some recent results. Coordination Chemistry Review, 411. (Rajput, Amit; Sharma, Anuj K.; Barman, Suman K.; Saha, Anannya and Mukherjee, R. February 2020)

Mathematical modeling and behavioral analysis of a washing unit in paper mill. International Journal of System Assurance Engineering and Management, 10, pp 1639-1645 (Kumar, Arun; Garg, Deepika and Goel, P.November 2019)

Systems Modeling and Analysis:A Case Study of EAEP Manufacturing Plant. International Journal of Advanced Science and Technology, 28, pp 8-18 (Rajbala, Kumar, A., and Garg, D., November 2019)

Enantioselective LC Analysis and determination of Selective Serotonin reuptake inhibitors. Biomedical Chromatography, 34 (1) , pp 1-18 (Sethi, S. and Bhushan, R., October 2019)

Mycobacterium tuberculosis programs mesenchymal stem cells to establish dormancy and persistence. Journal of Clinical Investigations (2019), Accepted (Fatima, S; Kamble, S.S., Dwivedi, V. P., Bhattacharya D., Kumar, S., Rangnathan, A., Kaer L. V., Mohanty, S. and Das, G., October 2019)

Influence of three diatom aldehydes against the dengue vector Aedes aegypti (Diptera:Culicidae). American Journal of Plant

Sciences, 10, pp 1749-1762. (Dhanker, R., Tiwari, A., Dahms, Hans-Uwe, Kumar, R. and Hwang, Jiang-Shiou, October 2019)

Hybrid genetic and particle swarm algorithm: redundancy allocation problem. International Journal of System Assurance Engineering and Management, 11, pp 313-319. (Devi, S. and Garg, D. October 2019)

RNA-loaded dendritic cells: more than a tourde force in cancer therapeutics. Immunotherapy, 11, pp 1129-1147. (Joshi, A., Tandel, N., Tyagi, P., Dalai, S. K., Bisen, P. S and K, R., September 2019)

ANFIS based Machine Repair Model with Control Policies and Working Vacation. International Journal of Mathematical, Engineering and Management Sciences, 4, pp 1522-1533. (Sethi, Rachita; Bhagat, Amita and Garg, D. September 2019)

Liquid Chromatographic methods foe separation, determination and bioassay of enantiomers of etodolac: A review. Separation Science, pp 1-13. (Singh, Manisha; Sethi, Sonika and Bhushan, R. August 2019)

Hydrophobic Mapping of Chlorobium tepidum, the Energy Generating Bacteria. Journal of Harmonized Research in Applied Sciences, 7, pp 98-106. (Roy Chowdhury, A., Kothari, A. 2019)

Phycogenic synthesis of nanoparticles supported on adsorbent models for the water remediation, Journal of Microbiology, Biotechnology & Food Sciences, 10(1), pp. 98-106. (Guleri, S., Singh, K., Kaushik, R., Dhankar, R., and Tiwari, A., 2020)

Epidemiology of Breast Cancer in Indian Women: Population and Hospital Based study, EAI Endorsed Transactions on Pervasive Health and Technology ISSN: 2032-9407, Volume 4,Issue 16, (ESCI Indexed), (Kumar, D., Batra, U.,2019)

Optimized approach for antipattern detection in service computing architecture, Journal of information and optimization sciences, Taylor and Francis, pp. 1069-1080, 40 (5), (Saluja, S., Batra, U., 2019)

Bot detection by monitoring and grouping domain name server record response queries in DNS traffic, Journal of information and optimization sciences, Taylor and Francis, pp. 1143- 1153, 40(5) ,(Vyas, A., Batra, U., 2019)

A Neoteric Swarm Intelligence Stationed IOT-IWD Algorithm for Revolutionizing Pharmaceutical Industry leading to Digital Health', Emergence of Pharmaceutical Industry Growth with Industrial IOT Approach, Elsevier, (Sharma, N., Batra, U., Zafar, S., 2019)

Secrecy outage performance of cognitive radio network with selection combining at eavesdropper', Recent Patents on Computer Science. (Chopra, K. Bose, R. and Joshi, A. 2019).(Scopus)

Intercept probability analysis of cognitive radio threshold- based system with diversity reception', International Journal of Sensors, Wireless Communications and Control. (Chopra, K., Bose, R. and Joshi, A. 2019).

Jindal, A., Geeta C "Real-time object detection and tracking using velocity control", Smart Systems and IoT: Innovations in Computing Proceeding of SSIC, book series (SIST, volume 141) Springer (Jindal, A., Geeta C., 2019). pp. 767-778.(Scopus)

Jindal A, Priya R"Landmark points detection in case of human facial tracking and detection", International Journal of Engineering and Advanced Technology, ISSN: 2249 – 8958, Volume-9 Issue-2, (December 2019), From 3769 To 3776. (Scopus)

Optimized approach for antipattern detection in service computing architecture, Journal of information and optimization sciences, Taylor and Francis, pp. 1069-1080, 40 (5), (Saluja, S., Batra, U., 2019)

Review of Concepts, Tools and Indices for the Assessment of Urban Quality of Life. Social Indicators Research,pp. 1-28, (Mittal, S., Chadchan, J., & Mishra, S. K.,2019).

Implementing block chain security to prevent DDOS attacks in networks', International Journal of Security and its Applications, 13(4),pp.27-40, (Ashu, Mahajan, R., Zafar, S.,2019)

Nagpal, A., & Singh, V. (2019). Coupling Multivariate Adaptive Regression Spline (MARS) and Random Forest (RF): A Hybrid Feature Selection Method in Action. International Journal of Healthcare Information Systems and Informatics (IJHISI), 14(1), 1-18.

Nagpal, A., & Singh, V. (2019). Feature selection from high dimensional data based on iterative qualitative mutual information. Journal of Intelligent & Fuzzy Systems, 36(6), 5845-5856.

Landmark Points Detection in case of Human Facial Tracking and Detection', International Journal of Engineering and Advanced Technology (IJEAT) 9(2), (A.J. & R.P.,2019) .

Conference:

Analysis of morphological opearations on image segmentation techniques', International Conference on Signals, Communication and Embedded Systems(ICSCES 2020),ICT Academy, India(Akansha and Nagpal,A., 14-18 October 2020)

Analysis of segmentation techniques using morphological operation on brain images', Fourth International (Online) Conference on Recent Trends in Communication & Electronics(ICCE 2020),KIET Group Of Institutions, India,(Akansha and Nagpal,A.,28-29 November 2020)

Optimization of K- Nearest Neighbors for Classification', Third International Conference on Futuristic Trends in Networks and Computing Technologies (FTNCT-2020),Jaypee University of Information Technology, Waknaghat,India(Kumar, S., Joshi,K. Jain,S.,and Roy,N.,14-16 October, 2020)

Energy Conservation in IOT: A Survey', Third International Conference on Futuristic Trends in Networks and Computing Technologies (FTNCT-2020),Jaypee University of Information Technology, Waknaghat,India(Agarwal,K.. and Roy,N,14-16 October, 2020)

Analysis of Histopathological Images using Machine Learning Techniques', Third International Conference on Futuristic Trends in Networks and Computing Technologies (FTNCT-2020),Jaypee University of Information Technology, Waknaghat,India(Singh,RJ.,Vijh,S., Kumar, S. and Roy,NR,14-16 October, 2020)

Revolutionary IoT and big data in healthcare :A predictive model analysis', Second International Conference on ICT for Digital ,Smart and Sustainable e- Development, Jamia Hamdard University, New Delhi, India.(Gautam,A. and Mehta,D.,27-28 February 2020).

Investigation of Ddos Attacks Influence on Steering Data in Mobile E-healthcare Sector',Third International Conference on Computing Informatics & Networks(ICCIN-2020) ,Bhagwan Parshuram Institute of Technology (BPIT), Delhi, India.(Gautam,A.,Zafar, S., and Mahajan, R., 29-30 July 2020).

Revolutionary IoT and big data in healthcare :A predictive model analysis', Second International Conference on ICT for Digital ,Smart and Sustainable e- Development, Jamia Hamdard University, New Delhi, India.(Gautam,A., Mehta,D.,27-28 February 2020).

DDoS attacks Impact on Data Transfer in IOT-MANET based E-Healthcare for Tackling COVID-19', International conference on data analytics & management: an Indo-European conference (ICDAM-2020)organised jointly by : jan wyzykowski university, Poland & B.M. Institute of engineering & technology, haryana, india(Gautam A., Mahajan R. and Zafar S.,18June,2020)

Frame change detection in videos challenges and reasearch directions', 2nd International conference on Artificial Intelligence and Speech Technology (AIST-2020) organised jointly by : Indira Gandhi Delhi Technical university for Women (IGDTUW), Delhi (Banerjee A., Ravinder M. and Kumar E .,19-20 November,2020)

Patents

Patent on COVID-19 Safety Machine for Portable Cart

Patent on COVID-19 Safe Biometric Identification Machine

Patent on COVID-19 Safety Machine for Portable Cart

Patent on COVID-19 Safe Biometric Identification Machine

Patent on ICIS-Cloud System:Intillegent Cloud Computing Information Sharing System

Patent on ICIS-Cloud System:Intillegent Cloud Computing Information Sharing System

Patent on ICIS-Cloud System:Intillegent Cloud Computing Information Sharing System