

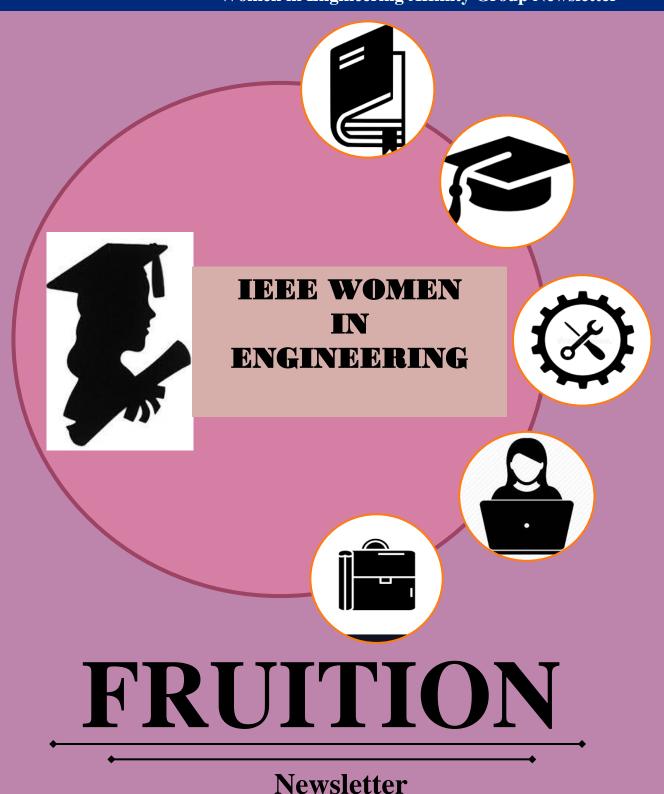


IEEE WOMEN IN ENGINEERING

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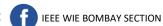
IEEE Bombay Section

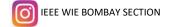
Women in Engineering Affinity Group Newsletter



Volume 1 | Issue 2 | July 2021

Our Social Media Handles:









Vision and Mission

Our goal is to facilitate the recruitment and retention of women in technical disciplines globally. We envision a vibrant community of IEEE Women and men collectively using their diverse talents to innovate for the benefit of humanity.

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IEEE Bombay Section- Women in Engineering(WIE) Committee Members



Dr. Varsha Turkar Chair



Dr. Sangita Chaudhari Vice chair



Dr. Mugdha Agarwadkar Secretary



Dr. Ujawala Bhangale Social Media and Creative Head



Dr.Aarti Karande Women Empowerment



Mrs. Mohini Naik Newsletter Incharge



Ms. Saumya Salian Technical Events Incharge



Mr.Yeshudas Muttu Technical Events Incharge



Mrs. Pallavi Sapkale Humaniatrian and Outreach



Mrs. Rushali Thakkar Social Media and Creative Head



Mrs. Ulka Padwalkar Humaniatrian and Outreach



Mrs. Komal Vyas (Thanvi) Member

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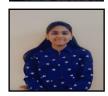
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Ms. Anagha Upparna Volunteer



Mr. Niket Shirodkar Volunteer



Ms. Netra Mudaliar Volunteer



Mr. Chaitanya Fulpatil **Volunteer**

PODIUM



Dr. Varsha Turkar Chair

I am overjoyed to see the second issue of the newsletter by IEEE WIE Affinity Group Bombay Section is being released. The current WIE AG committee was formed in January 2021. This newsletter covers all the events organized under IEEE WIE AG BS from January 2021 till June 2021. Various technical and non-technical events were organized through online mode due to ongoing pandemic situation. For all the events we have received remarkably good response and I am looking forward for amazing events and exceptional audience and volunteers in the upcoming year.

The contents of this issue are precisely presented by the editorial team and newsletter chair Prof. Mohini Naik. I applaud the editorial team and all the members of IEEE WIE AG BS who are working tirelessly to accomplish the objectives of this affinity group.



Dr. Sangita Chaudhari Vice-Chair

I am delighted to see the release of the second issue of the newsletter of IEEE Bombay section WIE Affinity The affinity group is instrumental organizing various technical and non-technical events in this pandemic in collaboration of other sections WIE AGs to reach to community to its fullest. Indeed, all events have received such an overwhelming response from various age group participants. I would like to congratulate the editorial team for coming up with this issue which is amalgamation of various articles to foresee usage of technology towards benefiting humanity. My best wishes volunteering team of IEEE Bombay section WIE Affinity group

Webinar on "Can LinkedIn profile be an alternative to Resume?"

Webinar on "Can LinkedIn Profile be an alternative to Resume?" was organized by IEEE WIE Bombay Section Affinity Group on December 28, 2020 at 5:30pm.

The speaker for this webinar was Prof. Avila Naik, Academician, Trainer, Motivational Speaker Content Writer and Mentor. LinkedIn profile is no substitute for the Resume, LinkedIn profile to complement the resume, set up your LinkedIn profile, these are the some of the major points discussed in the webinar.

There were total 25 participants in the webinar. The program was concluded with vote of thanks by Dr. Sangita Chaudhari, vice chair IEEE WIE Bombay Section.



Webinar on "Organ Donation - Save lives!"

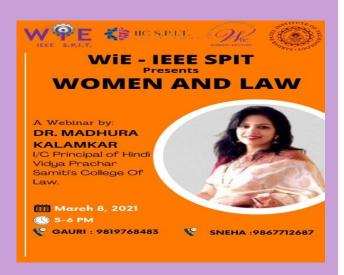
S.P.I.T. Student Branch in collaboration with IEEE Bombay Section WIE affinity group organized a Webinar on "Organ Donation- Save Lives!" on 27th February, 2021 at 5:00 pm.

The speaker for the webinar was Dr. Geetika Vashisth, she is working with ORGAN India, Parashar Foundation, as Head - Operations and Outreach and a Post Graduate in Public Health from Tata Institute of Social Sciences, Mumbai.

The speaker of the session elaborated on the donation Categories. The webinar helped the audience to make them aware about how one can contribute towards participating in an organ donation. The total numbers of participants were 25 during the webinar.



Webinar on "Women and Law"



Webinar on women and law was organized by S.P.I.T. Student Branch in collaboration with IEEE Bombay Section WIE affinity group, on 8th Mar 2021 from 5:00 to 6:00 pm.

The speaker for the session was Dr. Madhura Kalamkar has completed LLM and PhD in law from Bhartiya Vidyapeeth University in Pune. She quoted that, "A Women is a Mother, a Daughter, a Sister and a Wife".

She introduced participants to various laws related to women's rights. As she defined the various problems faced women, the few known cases such as the Shakti Mill Case, among others, came into the picture. She solely focused on the importance of women bravely tackling their problems and bringing about a change in the society. The total numbers of participants were 35.

Session on "Pageantry and Radio Jockey"



A virtual session on "Pageantry and RJ" was organized by S.P.I.T. Student Branch in collaboration with IEEE Bombay Section WIE affinity group, on 9th Mar 2021 from 5:00 to 6:00 pm.

The speaker for this session was Miss. Tanvi Malhara, she is a living example of beauty with brains. She is a former RJ and an excellent speaker. She has completed her BA in media studies and psychology from the Symbiosis School Of Liberal Arts.

The speaker shared her experiences about her personal life and her beauty pageant journey. She empathize on how much self-confidence is important and how it helps one's to stand out from others in a room. Later in the Question and Answer segment she answered the Questions asked by the host and participants. There were total 40+ participants and she encouraged everyone to pursue their dreams.

2 Days National Conference on Gender Bias in Technology

DAY 1

The National conference on Gender Bias in Technology is inaugurated on 8th March at 10:00 am. The inaugural ceremony was graced with the key note address by Mr. Vivek Sawant, Chief mentor, Maharashtra Knowledge Corporation Ltd and attended by AURO faculties and students along with the faculties from Shri Swamynarayan Vidya sankul. Besides the members present in the inaugural ceremony offline, University hosted 353 attendees online from different parts of the country.

The inaugural ceremony was followed by the panel discussion, Dr. Manu Tiwari, Dr. Rashmi Prakash and Dr. Prasanna Nambiar being the Panelist to discuss on the issue of 'Impact of Technology on mental health of male and female. The session was coordinated by Dr. Megh Goswami and Dr. Shailendra Singh. At the end of the Day 1, a very interesting technical session was beheld under the theme. It included eight papers presented by the faculties, research scholars and students from AURO University, Surat; M.S.University, Vadodara; Department of Computer Engineering, Don Bosco Institute of Technology, Mumbai: Computer Science and Engineering Department, Walchand Institute ofTechnology, Solapur and Women's Development Cell, DBIT.

DAY 2

The Day-2 of the conference was featured with the Panel discussion, technical session and the valedictory ceremony. The Panel discussion was held with the topic "Gender bias in access to information and communication technologies" with the experts like Ms. Mamta Rani Agarwal, Dr. Sulbha Ranade, Dr. Sunita Dhal & Dr. Ashwani Kottrashetti as the panelists.

The panel discussion was followed by Technical Session 2 where in all 8 papers were presented. The theme of the session was "Paradigm shift, new approaches and perceptions towards the growth of technology". The day ended with the valedictory session, where the organizers hosted Dr. Pankaj Mittal as the chief guest. Names of the winners of the Best Paper Award were announced and the session ended with Vande Matram.



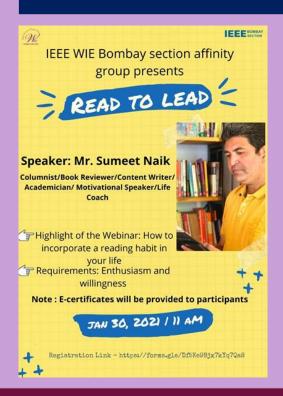
Panel Discussion on "Women Empowerment: Work, Health and Society"



The event "Women empowerment: work, health and society" was conducted on March 8,2021 at 3 pm, via online platform "Cisco Webex". The event was held under the presence of Dr. Varsha Turkar, Chair IEEE WIE AG Bombay section and Dr. S. B. Somani, Principal SSGMCE Shegaon. It was led and executed by the IEEE WIE AG Bombay Section and IEEE WIE SBAG SSGMCE Shegaon team under the Guidance of Conveners Dr. Varsha Turkar (chair IEEE WIE AG Bombay Section) and Komal Vyas (Thanvi) (Faculty Adviser IEEE WIE SBAG SSGMCE Shegaon). The Moderator for the event was Dr. Sangita Chaudhari (Vice-Chair IEEE WIE AG Bombay Section).

The Resource person and attraction of the event were Dr. Mrs. R. Srivaramangai, HOD IT Dept., University of Mumbai, Zarin Gupta, Founder Trustee and Chairperson Salaam Baalak Trust, Mumbai, Sharayu Sagar, Life and Happiness Coach, A Life Sparker, Purushottam Pendsey, senior Technocrat and one of the Founder of Computer Hardware Education in Vidarbha region. The main focus of the event was why "Women Empowerment" is needed? It is needed so that Women can get active involvement in every sphere of life.

Webinar on "Read to Lead"



The Webinar on Read to Lead, organized by IEEE WIE Affinity Group Bombay Section in association with IEEE Bombay Section on January 30, 2021 at 11:00 am. The Resource Person was Mr. Sumeet Naik, He is the Columnist/Book Reviewer/Content Writer/ Academician/ Motivational Speaker/Life Coach.

He briefed about in today's technology driven world most of us have forgotten the joy of reading, besides underestimating the power of deep reading exercise. Read to lead session was a step towards reconnecting each one of us to the sheer joy of reading

Stree@2021: Choose to Challenge

On account of International Women's Day, The Women in Engineering affinity group of the IEEE-VSIT Student Branch in association with WIE Bombay Section organized "Stree@2021: Choose to Challenge" on 13th March, 2021 on 11:00 AM TO 1:00 PM

The two guest speakers, Dr. Valsa B, (ISRO Scientist) and Ms. Swaima Ahmad, (Entrepreneur & TEDx Speaker) were welcomed by Khushi Sharma (EX WIE Chairperson) and the attendees were welcomed by Priyadarshini Sawant (WIE Chairperson). Dr. Sarika Chouhan (Branch Counsellor IEEE VSIT SB) Launched Stree@2021.

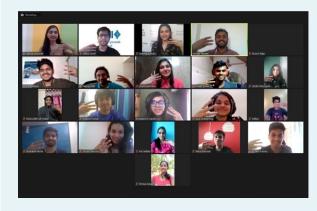
Dr. Valsa started her talk by firstly wishing everyone a Happy Women's Day, she suggested that everyone should hold events where women can meet, discuss, celebrate, show love and respect and chart out plans to make this world a better place. She spoke about the year 2020 and how Women stood at the front lines of the Covid-19 crisis, as healthcare workers, caregivers, Innovators, community organizers and as some of the most exemplary and effective national leaders in combating the pandemic. She continued with a small presentation explaining the different workings of the Indian Space Research Organisations workings and various missions like the Chandrayaan 1, Mars Orbiter mission, Reusable launch vehicle, followed by a short video about the PSLV rocket and the efforts that go into launching a spacecraft.

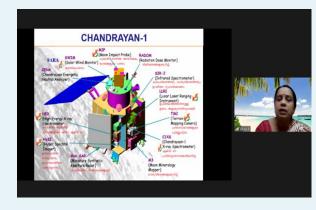
Chetna Bendale (WIE VSIT General Secretary) introduced our second guest for the afternoon Ms Swaima Ahmad TEDx Speaker, Social Activist along with a brief insight in our guests achievements and accomplishments.

Ms. Swaima Ahmed started her talk by speaking about the barriers in society that not only women but everyone faces in their lives on a day to day basis. She spoke about her experiences and told us about her journey which was certainly full of Ups and Downs. She inspired us by saying "no matter what lies in front of you, what lies behind you, what truly makes the difference is what lies within you". A short QnA session followed.

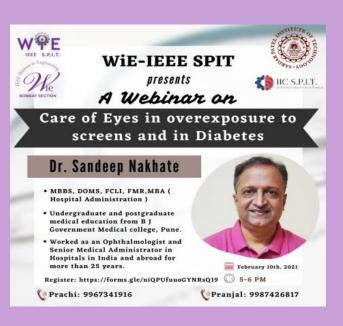
The event was brought to its conclusion by Priyadarshini Sawant (WIE Chairperson Affinity Group of IEEE-VSIT SB) presenting a vote of thanks to the speakers with a small virtual photo session with all the members.







Webinar - "Care of eyes in overexposure to screen & in Diabetes"



Webinar on "Care of Eyes in overexposure to screens and in diabetes" organized by S.P.I.T. Student Branch in collaboration with IEEE Bombay Section WIE affinity group on 10th March, 2021 at 5 pm.

The speaker of the webinar was Dr. Sandeep Nakhate (MBBS, DOMS, FCLI, FMR, MBA), he has worked as an Ophthalmologist and Senior Medical Administrator in hospitals in India and abroad for more than 25 years. He briefed us about the symptoms of overexposure to screen and highlighted the common mistakes people often make while using electronic gadgets.

He spoke about diabetes and it's effects on our eyes. He raised awareness about diabetic retinopathy, it's symptoms as well as treatment and diagnosis. He took up a few questions from the audience and generously answered them before concluding the event.

Webinar on "Yoga to support you"



S.P.I.T. Student Branch in collaboration with IEEE Bombay Section WIE affinity group organized a webinar on "Yoga to support you" on 11 Mar, 2021 from 5:00 to 6:00 pm.

The speaker of this webinar was Dr Sujata Kulkarn, She is certified as a yoga instructor from Ministry of AYUSH, Govt. of India. She is also an associate professor who holds a PhD in Electronics. The session began by seeking the blessings of Goddess Saraswati. The major theme of her talk was hormonal imbalance in females and how 30-40 minutes of everyday exercise and yoga help in maintaining the hormonal balance.

She demonstrated a few yogasanas like: Baddha konasana, Pashimottanasan, Ardha ushtrasana, Supta baddha konasana, Bhujangasana, Setu bandhasana, Ardha halasana, Sarvangasana, Matsyasana and Shashankasana.

IEEE-IPA Women's Day Special Event

IEEE WIE Affinity Group Bombay Section and IPA have jointly organized IEEE-IPA (Indian physics Association) Women's Day Special Event on 20 March 2021.

Dr. Varsha Turkar, Chair, IEEE WIE AG, Bombay Section, welcomed all the participants and introduced the resource person Ms. T. S. PADMA PRIYA, General Manager, SLRDC HAL, Hyderabad. Ms. T. delivered PADMA PRIYA a "TECHNOLOGY & **CHALLENGES** IN AIRBORNE SYSTEMS". She started her talk by explaining What Aerospace Industry is. And What does the industry engage in? She explained the parts, functions and operations of aircraft and highlighted the major differences between military and civil aircrafts.

A panel discussion on "What Can Make Difference for Women in Stem" was followed by the talk. Prof. S. Goswami, Dr. Mini Ulanat, Dr. Prasanna Nambiar Dr. B. Satyanarayana and Dr. Neha Shah were the panelist. The program was concluded by Vote of Thanks given by Dr. Vandana Nanal, General Secretary, IPA & TIFR







IEEE WIE Project Based Learning School Camp

The camp was organized from 3rd April to 11th April 2021. It included the inauguration ceremony, Session talks, hands-on sessions, followed by the presentation round and the closing ceremony.

The event witnessed the participation of 130+ students from 8 countries including India, Pakistan, Sri Lanka, Afghanistan, Bangladesh, Peru, Tunisia and Uruguay. A Collaborative Initiative by Ramneek Kalra (IEEE Impact Creator), WIE Gujarat Section, WIE UP Section, WIE Madras Section and WIE Bombay Section Affinity Groups in association with IEEE TryEngineering, Junior Einstein Track (IEEE YESIST12-2021). In order to provide knowledge of the importance of pre-university education in the school students from Grade 8th to 12th with the theme of "Website development and deployment without coding" in the form of a project on different problem statements as an end product learning showcase using Project-Based Learning Approach.



Webinar on "Docker Cloud & it's Application"

Webinar on "Docker Cloud & it's Applications" IEEE DMCE Student branch, Navi Mumbai and IEEE Bombay Section WIE AG organized an online webinar on Docker Cloud and it's Application on 3rd April 2021.

The main objective of this event was to make the participants aware about the fundamentals of Docker Cloud, Kubernetes and Security & policies. The event received a total of 63 registrations. The speaker for this webinar was Mr Amar Kalvikatte works for Nutanix – an American Cloud-based Product company where he is working as a Technology Leader and Field CTO. The session began with fundamentals of containers, Docker Architecture - Cluster /image /hub/ Container registries/ Networking/Pod, Kubernetes –LCM, scheduling, RBAC, Pod, Security & policies and ended with a quick demo on Cloud-native application design. The questions posted by the attendees were then answered by the speaker. The session was concluded with a vote of thanks from Ms. Vishakha Upadhay (IEEE DMCE Student volunteer member).



TERNION



TERNION - Website Launch, Newsletter Release & Video Contest Winners release was organized by IEEE Bombay Section WIE affinity group on 28th April 2021 from 7:00 pm to 8:30 pm. Dr. Mini Ulanat, Vice-chair, IEEE India Council, Dr. Saurabh Mehta, Secretary, IEEE Bombay Section, Mr. Hannan Satopay, Secretary, TPAC-IEEE Bombay Section were the special guests for this event. Dr. Varsha Turkar, Chair, WIE AG Bombay Section, briefed the audience about the activities under WIE AG BS since August 2020. Further the WIE AG BS website was launched by Dr. Varsha Turkar, Chair, WIE AG Bombay Section. This was followed by the release of the first edition of WIE AG BS Newsletter: Fruition by Dr. Sangita Chaudhari, Vice Chair, WIE AG BS and Prof. Mohini Naik, Newsletter co-ordinator. The final part of the grand event was initiated by Dr. Amoli Belsare & Prof. Yeshudas Muttu, Coordinator, TERNION, who briefed about the video contest, organized during International Women's day and announced the winners of the competition congratulated them.

Workshop on "Introduction to French"



Workshop on "Introduction To French" was organized by IEEE WIE Bombay Section Affinity Group from 14 to 15 May 2021, 10:00 to 12:00 am.

The instructer for this workshop was Mrs. Ginelle Stavio Gonsalves, Director and Teacher at Kriya Waldorf Inspired Educational Institute. Director and Teacher at Kriya Waldorf Inspired Educational Institute. Has 16 years' experience in teaching Western Music, Indian and Foreign Languages, Art, Calligraphy and Belly Dancing.

She gave a brief introduction about French Language and also motivated students to learn different languages. She also made participants aware about the opportunities available after learning different languages.

Incorporating Universal Human Values and their fulfillment: Exploring our Aspirations and Concerns

IEEE WIE Bombay Section Affinity Group organized a webinar on "Incorporating Universal Human Values and their fulfillment: Exploring our Aspirations and Concerns" on 14 May 2021 at 5:30 pm.

The speaker for the webinar was Rushali R.Thakkar, Sub Committee Chair IEEE-WIE. The speaker continued to bring awareness among the students of the basic human aspirations and their fulfilment. The first part was emphasized listing all the efforts they were making and their basic aspiration.

The participants were able to relate the discussion to their personal lives and were able to find out the steps that lead to basic aspiration. The event concluded with a Vote of Thanks by Dr Mugdha Agarwadkar.



Webinar on "Women Back to Work"

A webinar series on "Women Back to Work" was organized by IEEE WIE Bombay Section Affinity Group from 21 to 25 Jun 2021 at 5:30 pm IST.

The speaker for this webinar series were Mrs. Biji Tushar, Mrs, Lakshmi shekar, Mrs. Shalaka Verma, Mrs. Diptii Thakkar, Mr. D S Prashant. The main objective of this webinar series was to indulge in this interactive sessions and get inspired by industry experts.

The speakers spoke about how participation of women in workforce plays a crucial role in the development of an organization. They also informed about how it becomes difficult for women to return on the corporate from various perspectives, when they take a break from their career.

The number of participants for this webinar series was 25. The participants enjoyed the sessions and after the question and answer session the webinar series was concluded with a vote of thanks.



Course on "Deep Learning"

An online Instructor Led course on: 'Deep Learning' was organized by IEEE WIE Bombay Section Affinity Group in association with NVIDIA DLI, on 26 Jun 2021 from 9 am to 6:00 pm IST.

The speaker for this course was Dr. Meenakshi S Arya, is a NVIDIA DLI certified Instructor, Fellow IETE, Senior Member IEEE. She gave basic knowledge about Deep learning to all the participants with various examples at the beginning and then she started to get deeper in the topic.

The number of participants for this course was 30. All the participants were provided with e-certificates after completion of the webinar.



Webinar on "Cyber Awareness"

A webinar on 'Cyber awareness for School Teenagers' was organized by IEEE WIE Bombay Section Affinity Group in association with SIGHT IEEE Bombay Section, on 24 Jul 2021 on 5:00 pm IST.

The speaker for this webinar was Dr. Aarti Karande & Prof. Rushali Thakkar. they explained basic concept of Cyber crimes, how important is cyber security and what can happen when one is not aware about cyber security.

The number of participants for this course were 28. All the participants were provided with e-certificates after completion of the webinar.

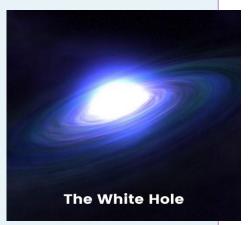


Article: White Holes

What are White holes?

I am pretty sure most of you must have heard about black holes, thanks to Hollywood sci-fi movies like Interstellar and Star Trek, and you might also be knowing a bit about their nature.

For those of you who joined the party a bit late, a **black hole** is a region of space-time where gravity is so strong that nothing—no particles or even electromagnetic radiation such as light—can escape from it. Physicist and astronomer, Karl Schwarzschild found the first exact solution to Einstein's field equations, calculating how space-time curves around a single spherical ball of mass.



And this laid the seeds of what physicists today call a singularity—a spherical mass shrunken down to an infinitely dense point, wrapping space around it so tightly that it pinches off from the rest of the universe. Anything which crosses the event horizon of a black hole, cannot go back. In simpler words, it will be sucked into the black hole.

What is the Event Horizon, you ask?

It is the boundary of the region from which no escape is possible. Therefore, the outside universe can influence the inside of a black hole's horizon, but the interior cannot affect the exterior. But what about their neglected twins - the White Holes. Yes, you guessed it right if you thought that white holes are the exact opposite of black holes, i.e., Objects from the interior of a white hole can exit it and interact with the outside world, but nothing from the outside can get in.

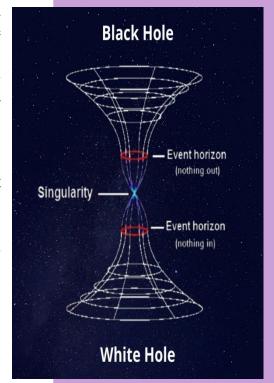
And again, contrary to the black holes, no outside event in the universe is ever going to affect the inside of the white hole. James Bardeen, a black-hole pioneer and professor emeritus at the University of Washington said, "Somehow it's more disturbing to have a singularity in the past that can affect everything in the outside world."

A white hole can be described as a black hole's "time-reversal" video, wherein, a white hole's event horizon is a boundary of no return — that is anything which has passed the event horizon cannot go back again into the white hole.

The question arises: Do White Holes exist? Now, nobody has seen a white hole in reality, but that is no reason to discount its existence. After all, we predicted the existence of black holes from Einstein's field equations many years before actually observing it. Just like black holes are the result of the first exact solution of Einstein's equations similarly white holes, in simpler terms, are another possible solution of Einstein's equations (An analogy, which might help in understanding, can be the two square roots of 9, i.e., 3 & -3). A good question here that would challenge the existence of white holes is— How exactly are white holes formed? Scientists have some idea as to how moderate-sized black holes are formed although they are not sure about supermassive ones. (A black hole can be created when a massive star, at the end of its life, implodes and collapses in on itself.) But we still do not know how white holes are formed. Formation of white holes would require some sort of reverse gravitational collapse, and it's not clear how that sort of event could ever occur. But all hope is not lost yet. Stephen Hawking discovered in the 1970s that black holes leak energy. Many physicists have asked, If a black hole evaporates away, what happens to the internal record of everything it swallowed? General relativity doesn't allow the information to escape and quantum mechanics forbids its deletion.

Many theories have been put forth in this respect, two of them are being described in short over here:

- 1. It might just happen that the black holes and white holes are glued to each other and connected by wormholes. But this theory requires the existence of stable wormholes (ones which do not close when any matter falls through them) and these are possible only if "exotic matter" exists with negative energy but no such matter has been found.
- 2. Another theory suggested by Rovelli, a founder of quantum loop gravity, states that "Maybe a white hole is the death of black hole,.....The two questions join nicely, but you have to violate the general relativity equations in the passage from one to the other." A scenario has been described by Rovelli where a black hole grows so small that it does not follow the normal behaviour and quantum randomness takes over at the particle level. This could transform the black hole into a white hole. Such a microgram white hole would not have any of the gravitational drama of its ancestor(the black hole) but would contain the information of everything it had swallowed in its previous life. Too small to attract orbiting matter, the white hole might remain stable enough to eventually spit out all the information accumulated by its forerunner.



So, all in all, we cannot conclude whether white holes exist or not but before we end this let us go back a few seconds and address something which has been staring us right in the face. In fact, instead of a few seconds let us go back to about 13.7 billion years ago — yes I am talking about the **Big Bang.** The Big Bang's explosion of matter and energy looks like potential white hole behaviour in many respects, and maybe the closest our Universe ever gets to having one. According to Haggard, "The geometry is very similar in the two cases, even to the point of being mathematically identical at times." Moreover, it lies in the past for any observer in the Universe and resembles a gravitational collapse in reverse.

Even though the equations of general relativity allow white holes, it doesn't mean that they actually exist in nature. White holes may share the fate of wormholes — mathematically permissible contortions of space-time likely prohibited by reality or they may exist in conjunction with black holes and it is only a matter of time before we discover them.

Article by: Hardik Shrivastava



Article: Rise of R. P. A. Technology

As an individual residing in this digital era, where everyone and everything is online, it's hard to miss the buzzwords artificial intelligence, machine learning and robotics being passed around constantly. With the ease of being able to avail everything online these days, from medical consultations to watching movies and shows anytime, anywhere, we often overlook the enormous amount of processes and data handling that takes place behind the scenes. From the collection, procession and distribution of these data files, all of it surely constitutes to become a gigantic pile of tasks, which would normally require the supervision of a human.

But not anymore. Incorporating the ingredients of the infamous ML, AI and other robotic processes have led to the invention of yet another handy technology, named Robotic Process Automation (RPA).

Robotic Process Automation (RPA) is an advanced technology that automates huge quantities of redundant and recurrent tasks. It is also referred to as 'software robotics' and is governed by business logic and structured inputs, aimed at automating business processes. RPA systems can process transactions, manipulate data, trigger responses, and also communicate with other digital systems. They have a wide range of applications in many industries, including insurance claims processing, invoice processing, customer feedback analysis, onboarding of employees, HR operations, and much more.

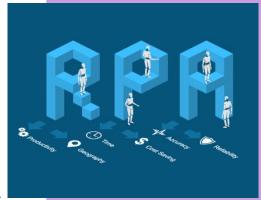
A notable scenario that proved its efficacy is of a large consumer and commercial bank that used 85 software bots to run 13 processes that handled more than a million requests in a year!

The capacity of these bots equalled 230 full-time employees! What's even better is that they managed to pull this off at 30 per cent of the cost of recruiting more staff.

AI and RPA, both of these technologies have similar tasks of automated processes and are both very closely related to robotics. However, they are neither codependent nor the same and their combination can unlock some great possibilities for enterprises.

AI is enabling RPA systems to scientifically discover a complete range of automation opportunities and build a robust automation pipeline through RPA applications. As many companies need to accelerate their integration of AI into front-line activities and decisions, they find RPA to serve as AI's 'last-mile' delivery system. Robots can be configured to apply machine learning models to automated decision-making processes and analyses, incorporating machine intelligence in many day-to-day operations.





Article by: Tanisha Sheikh



Why be a part of WIE...?

IEEE Women in Engineering (WIE) is one of the largest international professional organizations dedicated to promoting women engineers and scientists, and inspiring girls around the world to follow their academic interests in a career in engineering. The mission of IEEE WIE is to facilitate the recruitment and retention of women in technical disciplines globally. IEEE WIE envisions a vibrant community of IEEE women and men collectively using their diverse talents to innovate for the benefit of humanity. Membership is free to Life Members, Student and Graduate Student Members.

WIE is available to new and existing IEEE members only. Before joining WIE, existing members must renew their IEEE Membership for the current year.

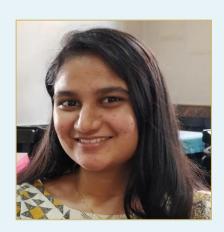
Learn more about the WIE International Leadership Conference that provides leading-edge professional development sessions focusing on leadership, innovation, technology, and entrepreneurship that aims to inspire and advance mid-level and senior technical professionals globally.

Websites:

https://wie.ieee.org/

https://r10.ieee.org/bombay-wie

Happy Volunteering



MS. Praharsha Nuti

IEEE is more than an organization, it is a tight-knit community and I have been welcomed into this community with open arms My years of volunteering at the Student Branch at Sardar Patel Institute of Technology have been one of the most rewarding and enriching experiences of my life. I began my journey as a subcommittee member in my first year and have grown to the Student Branch Chair by my third year. In my three years at this organization, I have developed strong leadership skills, learnt how to communicate effectively and have learnt to deal with unexpected situations. I have had the opportunity to meet people from different fields of study, from all over the globe and have had the opportunity to learn from their varied experiences. IEEE has aided me in recognizing my untapped potential and cultivating it to help me reach the pinnacle of achievement.

IEEE has provided me with incredible mentors who guided and assisted me whenever I needed it. With their support and encouragement, I have grown immensely. Having been associated with this committee for three years now, I'm glad I have been able to contribute to its cause and end my term on a high note.



MS. Trusha Talati

Charles F. Glassman once wrote "Even a smallest change in our daily routine can create incredible ripple effects that expand our vision of what is possible" being a volunteer for Women in Engineering (WIE) not only gave me a vision of a bigger world but also taught me the true meaning of stepping out of one's comfort zone.

Like a bird is overwhelmed the first time it actually learns to fly, the experience of getting to interact with bigger world and working for a cause was too overwhelming for me. However at every step of my way, I had my mentors and people to look up to every time I stumbled, for which I am utterly grateful.

The volunteering experience at WIE has not only been a life-changing experience for me. But has also helped me to grow in immense ways and taught me to explore various possibilities in life. Lastly, the most important thing it has taught me is to learn to grab every good opportunity that life throws at you and not to regret it. At the end of the day, it all makes difference.

Newsletter Team

Prof. Mohini Naik Gadekar Ms. Ankita Gajbhiye Ms. Tanu Gupta

Message from the Team

Hello Readers!!

It is our privilege to present before you the second issue of "FRUITION" – bi yearly newsletter of WIE IEEE BOMBAY Section.

FRUITION is more than a newsletter that highlights various articles by student members and events organized by WIE IEEE BOMBAY Section from January – July 2021. Compiling the newsletter was a successful group effort and we thank each member involved in this activity.

We thank IEEE Bombay Section and WIE AG Bombay Section for their constant support and encouragement. We hope you enjoy your reading experience with FRUITION.

We shall see you soon with the new issue of the FRUITION...

Until then, keep learning, Dream Big, Stay Safe!!!

CONTACT US: Email: ieee.wie.bombay@gmail.com

Contact: Prof. Mohini Naik Gadekar +91 9823509033