

IEEE Signal Processing Society Gujarat Section

NEWSLETTER VOLUME 2 | ISSUE 1

Message from IEEE R10 Director

Dear All,

We are still passing through very challenging time and uncertainties. Last couple of years have taught us to be collaborative to succeed and we have exhibited teamwork with great success and many achievements to our credit.

Gujarat Section has always been known for its dedicated volunteers, who respect each other and adhere to IEEE code of ethics. Our committees have very good plans to engage members but let us work towards its effective and efficient executions.

Let us focus our activities to promote industry academia partnership programs for the benefits of students, young professionals, women in engineering and members. This shall foster career growth and shall also create opportunities. IEEE provides you lots of opportunities and also gives

opportunity to create opportunities, let us explore all possible avenues of engagement and growth.

I would like to congratulate the leadership of Gujarat Section for getting IEEE Region 10 flagship conference - '2023 R10 Humanitarian Technology Conference', this has come through rigorous selection process of Region 10 and all involved in the preparation of the proposal deserve appreciation.

I am sure that Gujarat Section will keep bringing laurels under the able leadership of the Chair and dynamic volunteers.

Looking forward to working with all of you to further mission and vision of IEEE.

With best wishes! Deepak Mathur.

Message from IEEE SPS Gujarat Section Vice-Chair

The IEEE Signal Processing Society has been the world's premier professional society for signal processing researchers and professionals since 1948. The IEEE SPS Gujarat chapter is one of the most vibrant and dynamic chapters in the world. The chapter was established in the year 2014 and since then it grows exponentially. Our members have come to associate our chapter with quality events and the shape of the events is given by the chapter members and various IEEE SPS student branches. Our chapter collaborates with other chapters to benefit the local members in multidiscipline. With the team's efforts, the chapter won the Best Chapter Award for the year 2021 among 200 IEEE SPS chapters of the world.

With this, I am appealing to all leaders to open the SPS SBs and take advantage of various leadership and technical programs. I am eagerly looking forward to working with all members and student branches. Let us all work together to make this chapter unique and cheerful.

Dr Mita Paunwala
Vice Chair IEEE SPS Gujarat Chapter





POWER OF PINK

8th March 2022

Women's Day Celebrations

Venue: Online

Organized by: IEEE SPS GS WiSP

Number of Participants: 42



AUGMENTED REALITY/VIRTUAL REALITY (AR/VR)

9th April 2022

Venue: Webex - Online

Organized by: IEEE SPS, GS in collaboration with

IEEE Silver Oak SB under the Technical Talk Series

2022.



ADVANCES IN DEEP LEARNING FOR MULTIMEDIA

3rd-5th March 2022

Venue: Webex - Online

Organized by: IEEE SCET SB, IEEE SCET SPS SB



MACHINE INTELLIGENCE IN IP

15 February 2022

Venue: Online

Organized by: IEEE SPS GS, SCET SB

R3NDER MARCH: WIDEN YOUR PERSPECTIVE

19th March, 2022

Venue: Offline

Organized by: Silver Oak University IEEE WIE AG

and Silver Oak University IEEE SPS SBC

PARALLEL PROCESSING USING OUR SUPERCOMPUTER

23rd April, 2022

Venue: Offline

Organized by: SOU IEEE Student Branch



DATA SCIENCE CHALLENGE 1.0

28th - 29th Jan, 2022

Venue: Online

Organized by: IEEE SPS SCET SBC, IEEE SCET

Student Branch & IEEE SPS GS

Number of Participants: 108

WINTER SCHOOL ON ADVANCES IN DEEP LEARNING FOR MULTIMEDIA SIGNAL PROCESSING

3rd - 5th March, 2022

Venue: Online

Achievements

Giriraj Shah, Vice-Chair IEEE GCET
Student Branch received ICASSP 22
Singapore Travel Grant

IEEE SPS Chapter GS has been awarded "Chapter Certification" valid up to 2026.

IEEE SPS GS received the Chapter of the Year Award for year 2021 in ICASSP 2022 at Singapore

In Conversation with Vandana Verma, Security Relations Leader - APJ, Chair at OWASP & InfosecGirls

1. Why is cyber security so important and which areas demand urgent attention?

Security is an important pillar for the functioning of the overall society and as more and more of our lives and everything around us becomes digital, cyber security also becomes extremely important.

Everything we do today is on digital platforms, be it shopping, banking, or connecting with friends and family hence if the interactions are not secure and it is a threat to the functioning of society hence cyber security becomes so important and demands urgent attention.

2. How do we see cybersecurity changing the world?

CyberSecurity is changing the world for good. The more and more individuals and organizations become dependent on computers and the internet, it becomes equally essential for people to feel secure, hence cyber security is changing the world in a way that more and more individuals and organizations feel secure in the world of digital.

3. What are the things bringing more people close to cyber security?

There is an increasing awareness of the need for cyber security. Cyber attacks are making headlines and organizations are making new investments in cyber security. This is attracting more and more individuals being interested in cyber security for careers as well as innovation in the domain.

In Conversation with Vandana Verma, Security Relations Leader - APJ, Chair at OWASP & InfosecGirls

4. What can companies do to ensure security in the IT industry?

Thinking about security from the beginning and incorporating it when designing and building IT systems is important. Security cannot be an afterthought anymore. I the cost of breaches surpass the cost of doing security right from the start. Additionally, organizations should also ensure sufficient preparation to respond to breaches and incidents.

5. Now in the new normal, a lot of organisations moved to the cloud. What is the cloud?

Cloud is all about accessing shared computing resources programmatically via APIs and various access controls built around them so cloud security is using a set of policies, technologies, applications, and controls to protect your data in the cloud. Cloud is easy to use and almost feels like magic to end users but behind the scenes, it is a complex technology stack. Organizations must ensure their staff are adequately trained and aware of working in the cloud.

6. How can students make a career in Cyber security?

Students can start learning about the inner workings of technologies, develop a mindset around how these technologies can be attacked and then learn about the security around them. Learning programming languages, OS concepts and networking concepts do serve as fundamental skills and then diving into specialized domains like web security, network security, and malware analysis makes sense. They should follow the approach of 'learn by doing and build hands-on skills. There is a huge demand for people who have the skills. Cybersecurity certifications and degrees do help but they are not a blocker for anyone who has the relevant skills.

Message from Giriraj

In Conversation with our Mr Giriraj Shah, IEEE SPS GS Volunteer

1. Share your experience of volunteering for IEEE SPS GS.

I got in touch with IEEE SPS GS first when I was about to introduce SPS Chapter into my Student Branch and that's when I realised how professional and at the same time very helpful the section is. I got all the required help from the section not only while establishing the chapter but also about how to maintain it. During the pandemic, while everyone was tired of organizing and attending the same kind of webinars, SPS GS guided us to present some unique and innovative events in which the students would like to participate. Not only this, but my student branch got many opportunities to volunteer, manage and represent in many different events at different levels due to SPS GS.

2. Which kind of activities did you volunteer for?

During my academic year as a Founder Chairperson of SPS GCET, I was part of events such as

- 1. Inauguration Ceremony of IEEE SPS GCET and IEEE SPS SCET by Dr KVS Hari followed by the 2. Expert Talk "Sensing and Signal Processing for Autonomous Navigation".
- 3. Expert talk on Data Science and Big data: From Introduction to Application, 12th June 2021.
- 4. Expert talk on Applications of Deep Learning in Medical Image Analysis, 21st July 2021.

Managed Publicity for Dr Chirag Paunwala's President Election Campaign.

5."Online workshop for Python Programming", Was the intermediate between SPS GS and Dr Priyang Bhatt, for arranging the talk for SPS GS.

Message from Giriraj

3. Share your honest opinion on whether you recommend your friends/ colleagues to join our community?

For sure!

It's like the way it was beneficial to me from the professional point of view, I could not learn it anywhere else. The members and colleagues here are very responsive and caring in nature which boosted my confidence to learn from them technically as well as the qualities one needs while being in a professional career.

And I can say that these points helped me a lot to crack my placement interviews in 3 reputed companies. I would recommend my juniors to be a part of it. I will show them how it has been beneficial to me directly or indirectly and how it will go about as a decent open door for future proficient life.

4. Share about the ICASSP Student grant you received.

Recently, I had my first international visit/trip (May 2022, Singapore) and that too was because of IEEE SPS.

Yes, the IEEE Signal Processing Society selected me to attend the 2022 International Conference on Acoustics, Speech and Signal Processing which was held at the Sands Expo and Convention Center, Singapore from 22nd to 27th May 2022.

Owing to my contributions towards IEEE for the past 4 years as well as towards IEEE SPS, as Founder Chairperson of SPS GCET Chapter 2021, I was selected to receive a travelling grant of 1000 USD to attend the conference.

Additionally, as we all know, IEEE SPS Gujarat Chapter is named "The 2021 Chapter of the year" globally. I was representing the winning chapter on the international level and accompanied Prof. (Dr.) Chirag N. Paunwala, IEEE SPS GS Chair to receive the prestigious award during the conference.

Message from Giriraj

During the conference, I got the opportunity to interact with a lot of other Student members, working professionals and industrybased personalities not only from India or Singapore but from almost all the regions of IEEE.

It was so interesting to know about the recent tech trends, current industrial requirements, field knowledge, workflow, timeline and plans from the industry persons themselves. It was also an amazing experience to interact with all the Research paper presenters.

We also got a chance to converse with several of the events sponsors namely Huawei, ASAPP, Zoom, ByteDance, Sony Android TV, Sonos, Inc., Appen, DataForce, Speechocean, S.E.A Hltcode, D.Al, Springer Professionals etc. to understand their products and technologies they are developing and working with.

Fun fact!

In the registration kit, we received free tickets to so many famous attractions of Singapore including Marina Bay Sands Sky deck, Singapore Flyer, Art and Science Museum, Gardens by the bay and a lot more perks that allowed us to explore Singapore along with the conference.

This trip was truly an incredible experience for me as a fresher into the corporate world and of course as a young professional. This would be impossible without Prof. (Dr.) Chirag N. Paunwala and Dr Mita Paunwala, a big thanks to them to make this trip possible for me.

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