YOUTH IGF INDIA

REPORT

5th Annual Youth Internet Governance Forum India

25th September 2022

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About Youth IGF India

History

The Youth Internet Governance India was founded in 2018 by Ihita Gangavarapu and Shahul Hameed, who were the fellows of the India School of Internet Governance, 2017 (inSIG 2017). They received mentorship from Mr. Satish Babu (At-Large Advisory Committee (ALAC) ICANN, President InApp Infotech), Dr Govind Kumar (Ex-CEO, NIXI), Ms. Amrita Choudhury (Director CCAOI, UN IGF MAG Member, Chair at APRALO ICANN), Mr. Samiran Gupta (Head - Public Policy and Philanthropy, India and South Asia, Twitter) & Mr. Srinivas Chendi (Senior Advisor Policy and Community Development, APNIC) during inSIG 2017 to work on this initiative. The same year, their initiative received recognition from the United Nations Internet Governance Forum Secretariat.

Subsequently, the first edition of Youth IGF India was held on 12th of October, 2018 at Indira Gandhi Technology University for Women in New Delhi with the support from inSIG, ICANN, APNIC, IGDTUW and Internet Society followed by its second edition at St. Xavier's University, Kolkata on 14th November 2019.

Due to the pandemic, Youth IGF India organized its third annual forum virtually from 30th October 2020 to 1st November 2020 with the support of InSIG and Facebook. The fourth annual forum too was held online on 4th to 5th December, 2021 with support from ISOC, Chennai.

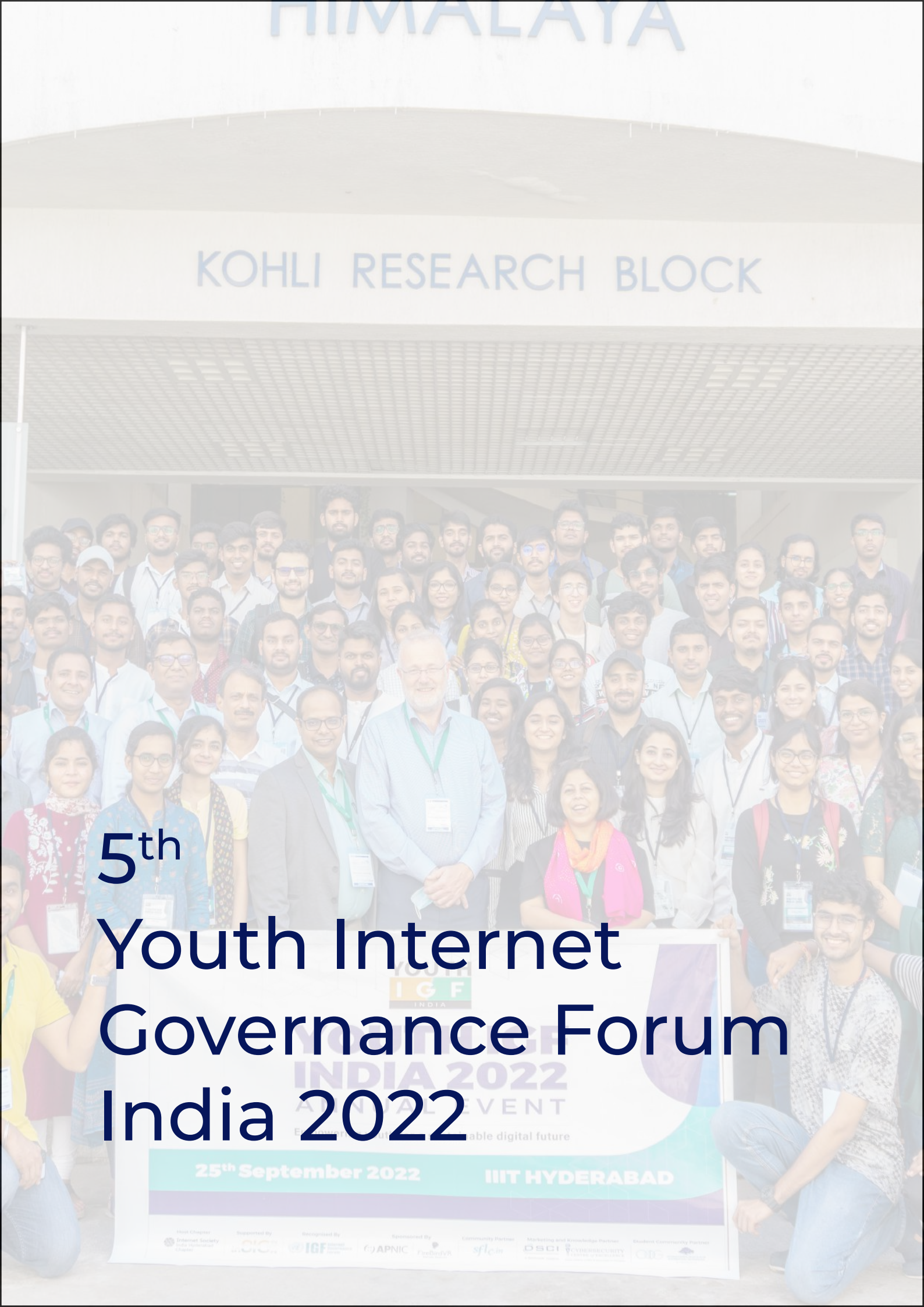
This year, we went back to the offline mode after two years and organized our fifth annual forum in IIIT, Hyderabad on 25th September, 2022. This year's edition was supported by inSIG, ISOC Hyderabad, OSDG at IIIT Hyderabad and Meta. We received sponsorship from APNIC and FirebirdVR. We also had Software Freedom Law Center supporting us as our community partner and Cybersecurity Center of Excellence, DSCI (NASSCOM) as our knowledge partner.

Vision

The core initiative is to raise awareness among youth on internet governance. We intend to encourage young generations to participate in public policy discussion making, in order to build a new cadre of Internet leaders who are motivated to learn, engage, and act within their region and beyond.

Objectives

- Improve young people's understanding of global and regional internet policies;
- Provide a platform for young people to raise and discuss policies and issues that affect them;
- Help develop practical advocacy skills for youth for engagement in IG related policy discussions;
- Guide them to the right opportunities available to take a deep dive into IG discussions;
- Enable the youth to understand the intersection between technology and policy, in order to promote more informed policy making, and technology development in the future.



5th Youth Internet Governance Forum India 2022

After four successful editions, the fifth annual forum of Youth IGF India 2022 was organized in IIIT, Hyderabad on 25th September, 2022. The theme for this year's annual event was 'Empowering Youth for a Sustainable Digital Future'. Based on the theme, we had sessions covering topics in the broad realm of data, trust, security and sustainability. The event saw participation of 100+ youth from all across India. .

This year, we received immense support from inSIG and kicked off our event as day 0 of inSIG 2022 annual forum. We also received support from ISOC, Hyderabad and UN Internet Governance Forum and Meta. We received sponsorship support from APNIC and FirebirdVR. For marketing and knowledge dissemination, we had the support from Cybersecurity Center of Excellence, DSCI (Nasscom). Software Freedom Law Center (an organization working for digital rights), provided us support as a community partner. OSDG, IIIT Hyderabad provided support as volunteers during the event.

The one-day event had 19 speakers spread across 11 sessions. The sessions were a mix of keynotes, interactive classroom sessions, panel discussions, and group Activities. The sessions were structured in a manner to keep the learning and discussions engaging and interactive.

Some of the highlights of the event were:

- The one-day event had sessions covering diverse critical IG topics such as basics of internet governance, digital inclusion and accessibility, sustainable data governance, cybersecurity and safeguards, blockchain and cryptocurrency, emerging tech and related challenges and understanding of the core internet functioning.
- We had renowned speakers to address the key topics this year, which included:
- Mr. Maarten Botterman, Board of Directors - ICANN to present the inaugural keynote
- Ms. Rama Devi Lanka, Director, Emerging Technologies, Government Of Telangana on Emerging Technologies: Challenges and Way Forward
- Dr. Bhagwan Chowdhry (Professor of Finance, Indian School of Business (ISB) and Mr. Osama Manzar (Founder & Director at Digital Empowerment Foundation) addressing the topic on Data Inclusion and Accessibility.
- Shri. Narendra Nath, Joint Secretary (National Security Council Secretariat) and Dr. Sriram Birudavolu (CEO - Cyber Security Centre of Excellence DSCI (A NASSCOM Initiative) addressing the topic of Cybersecurity and Online Safeguards: An Open Letter for Greater Online Security.
- The complete agenda of the event can be found here.

Organizing Process

In June 2022, we circulated an open call for Indian youth to join the Organizing Committee (OC) for the fifth annual event of Youth IGF, 2022. The OC members were selected through an application process that evaluated their professional background, interest in IG and a India specific IG challenge that they are passionate about solving. This call was open to Indian youth in the age group of 18-30 years. A diverse seven member OC team was formed to discuss and finalize our roadmap for Youth IGF India 2022.

The 2022 Organizing Committee consisted of the following:

a. Ihita Gangavarapu (Civil Society)
b. Allen P. Alex (Private Sector)
c. Pratik Ghumade (Private Sector)
d. Purnima Tiwari (Civil Society)
e. Shradhanjali Sarma (Private Sector)
f. Atif Mohammad (Technical Community)
g. Tanzeel Khan (Technical Community)
h. Pranay Das (Civil Society)

Later additions to the OC included:

a. Mohan Raidu, President ISOC Hyderabad chapter (Private Sector)
b. Pradeep Verma, Scientist 'C', Internet Governance Division, Ministry of Electronics and Information Technology, Government of India (Government Sector)

The following committees were formed after the second meeting:

1. Fellowship and Participation Committee: Responsible for the fellowship component of the annual event. The Committee was responsible for opening the application process for fellows, for selecting the fellows and for conducting mentorship sessions and planning activities for the fellows for a period of two months.
2. Agenda and Program Committee: Responsible for finalizing the agenda as per the multistakeholder model. The Committee was also responsible for getting in touch with speakers for each session and in finalizing the speakers.
3. Partnership and Collaboration Committee: Responsible for contacting potential partners for the event and for exploring potential collaborations

We were supported and supervised by our Advisory Committee, which included the following members:

a. Amrita Choudhury (Director CCAOI, UN IGF MAG Member, Chair at APRALO ICANN)
b. Sunny Srinivas Chendi (Senior Advisor Policy and Community Development, APNIC)
c. Satish Babu (At-Large Advisory Committee (ALAC) ICANN, President InApp Infotech)
d. Sabrinath G. Pillai (President, ISOC TRV)

In the first week of September, we opened the registration for everyone irrespective of their age group and nationality.

Youth Internet Governance Fellowship 2022

About the Fellowship

The Youth Internet Governance Forum Fellowship was initiated in 2022 with the aim of building a new cadre of internet leaders who are motivated to learn, engage and take action to strengthen the internet governance policy ecosystem. The YIGF Fellowship Program provides focused mentorship and guidance to the best young minds from diverse backgrounds.

Given that internet governance is a space which requires multi-stakeholder perspectives to an issue, the fellowship selects individuals from different educational and professional backgrounds. The fellows are selected in a manner to ensure that every stakeholder group is adequately represented. The stakeholder groups include private, academia, technical, and government. This helps to maintain the balance of ideas while discussing any issue/problem/policy pertaining to internet governance.

These young minds are exposed to the internet governance space for a period of two months through mentorship sessions, mock stakeholder consultations and case study sessions on real-time issues pertaining to internet governance. As next generation policy leaders, the fellowship provides an opportunity to analyze policies from different perspectives in order to strengthen the policy ecosystem.

Selection Process

The selection process includes the following three steps:

1. Releasing the fellowship application form. The form is structured in a way through which the interest of the applicant in internet governance space can be gauged.
2. After the closure of the application process, the fellowship committee, which is a part of the organizing committee, goes through the applications and selects the fellows.
3. The criteria for selection are: interest in internet governance, past experience, and how they plan to be involved in the fellowship program and how they intend to create impact after the fellowship.

The Fellows

This year, we received a total of 450 applications. We selected 10 fellows out of 450 applicants. The fellows for this year belong to diverse educational and professional backgrounds, and represent the different stakeholder groups.

The fellows for this year's fellowship:

1. Adhiraj Gupta, Tata Institute of Social Sciences, Hyderabad
2. Harsha Kavi, Kautilya School of Public Policy
3. Karthik Nagapuri, Anurag University
4. Manogna Matkuru, Kautilya School of Public Policy
5. Nishka Kapoor, NALSAR University of Law, Hyderabad

6. Rashmi Ranjan Pani, Consultant, Government of Odisha
7. Saiyam Bukurchunde, School of International Relations and Strategic Studies, Mumbai University
8. Samriddhi Kumar, Symbiosis Law School, Pune
9. Srishti Joshi, Analyst, Center for Communication Governance
10. Tathagat Sarma, Advocate, Supreme Court
11. Yaqoob Alam, Saraf and Partners

Mentorship Sessions

One of the most significant aspects of the fellowship was capacity building and to educate the fellows on the different issues pertaining to internet governance. Therefore, for the first time in five years, we built a mentorship program for our fellows.
The mentorship sessions aimed at disseminating knowledge on the internet governance space and in engaging in real-time issues in this space. Through these sessions, we discussed various topics in internet governance such as internet as a human right, basics of internet governance, responsible AI, career opportunities in internet governance space.

The mentorship sessions were structured in the following manner:

1. Basics of Internet Governance by Radhika Jhalani, Volunteer Legal Counsel, Software Freedom Law Center: This was the first session for our fellows. Through this session, we wanted to give a brief overview of the internet governance space, and the different components under it. Radhika Jhalani led the session and explained the varied aspects of this space, and gave examples of the topics that are of relevance today. She also explained the different issues/problems that policy makers face and have to find solutions to.

2. Internet as a Human Right by Apar Gupta, Executive Director, Internet Freedom Foundation: Apar Gupta explained the legal position pertaining to internet shutdowns and provided lucid examples of internet shutdown through discussions on Supreme Court judgments. The session also included two case studies which were extensively discussed with the fellows in order to apply the theoretical knowledge into practice.

3. Responsible AI by Ameen Jauhar, Senior Resident Fellow, Vidhi Center for Legal Policy: Ameen Jauhar introduced the topic with a brief overview. He explained how AI can be used responsibly and the ethical considerations surrounding AI. He also explained the principles that need to be followed for building responsible AI. Towards the end, there was an interactive discussion on facial recognition technique and the manner in which it can be used responsibly.

4. Career Opportunities in Internet Governance by Anju Mangal, Head of Asia Pacific, Alliance for Affordable Internet, WWW Foundation: Anju gave a holistic idea on the ecosystem of Internet Governance. She introduced the various organizations like the International Telecommunications Union (ITU) and Institute of Electrical and Electronic Engineers (IEEE), who play a significant role in the infrastructural level. She helped fellows understand the different pathways that they can pursue and

contribute to Internet governance and stressed on the importance of prioritizing the communities' concerns. She explained the fellows on the various ways that they can join or align their career in IG domain. Her session provided a much needed international perspective on the processes and designs which exist in IG.

5. Career Opportunities in Internet Governance by Nidhi Singh, Center for Communication Governance: Nidhi provided the fellows an insight into the different ways through which one can build a career in internet governance. She spoke about different fellowships such as ICANN fellowship and ISOC early career fellowships.

Miscellaneous Activities

The mentorship sessions were supported by the miscellaneous activity session. As the name suggests these were activity oriented sessions which were mostly internal and tailor made by the OC to engage the fellows more into the contemporary discussion points of IG. These sessions specifically focused on enhancing the involvement of the fellows in understanding the issues, discussing their ideas, implementation strategies of these ideas, and how to balance out the equation with other key stakeholders.

The miscellaneous activities were conducted in the following manner:

1. Stakeholder Consultation: The stakeholder session was conducted with an aim to introduce the fellows to the idea of public consultation. The session was an internal one, without any external mentors. The fellows were given a case study on virtual voice assistants, and were asked to find policy solutions on behalf of different stakeholder groups.

2. Rapporteur Reports: During the main event on 25th September, 2022 held at IIIT, Hyderabad, the fellows were allotted different sessions and were asked to submit rapporteur documents.

3. CCAOI Report on Draft Telecom Bill, 2022: On 14 October, CCAOI carried out an online interactive stakeholder discussion "Demystifying the Indian Telecommunication Bill 2022" on the Draft Indian Telecommunication Bill, 2022 which the Department of Telecommunications (DoT) has released for public consultation. The Bill aims to create a comprehensive legal framework governing telecommunication by replacing the existing Indian Telegraph Act, 1885, the Wireless Telegraphy Act, 1933 and the Telegraph Wires (Unlawful Possession) Act, 1950.

   It was a 110 mins session, which was attended by over 85 people. The session was moderated by Amrita Choudhury (CCAOI) and Akshi Rastogi (Shardul Amarchand Mangaldas & Co.) The expert speakers at the session were Neha Chaudhari (Ikigai Law), Uthara Ganesh (Snapchat), Dr Mahesh Uppal (Independent Consultant), Rajesh Chharia (Internet Service Providers Association of India), Kazim Rizvi (The Dialogue) Nikhil Pahwa (MediaNama) and Amit Mathur (Jio).

Youth India IGF collaborated with CCAOI for the session for the drafting of the report. Our three fellows i.e. Samriddhi Kumar, Yaqoob Alam and Rashmi Ranjan Pani were rapporteurs for the online interactive session and helped in writing the report which was released by CCAOI. The report can be accessed here.

4. Feedback on Draft Telecom Bill, 2022: We have also submitted our comments/ feedback on the Draft Telecom Bill, 2022. Our fellows have helped in analyzing the policy, and in suggesting possible solutions.

5. Post-YIGF Engagement session: YIGF OC scheduled an interactive session with the fellows to understand the fellows' aspirations in contributing to the field of internet governance..

6. Digital Security Training by Software Freedom Law Centre (SFLC): SFLC organized a session on Cyber security training and gave detailed ideas on the threats on user data and privacy. The speakers asked the fellows to put their email id in the site "have i been pwned" which gives a list of all the times that the individual's id has been breached. The speakers suggested a lot of security tips like using a safe platform to access the mail, practicing 2 Factor authentication, incognito keyboard apps, avoiding sharing biometric information whenever possible, prefer messaging apps with disappearing messages, and how charging stations too can compromise user data.

Youth IGF India 2022: Session Summaries

The sessions have been summarized by the fellows and members of the OC. The summaries of each session are as under:

Session Title: Inaugural Keynote
Session Duration: 15 mins
Speaker: Martenn Botterman (ICANN Board)
The inaugural keynote focused on the importance of engagement and meaningful contributions to the IG community. Maarten spoke about the work done by ICANN, the ICANN community and briefly on fellowship opportunities. The keynote set a tone for the upcoming sessions and motivated the youth to engage in IG sustainably.

Session Title: Opening Address
Session Duration: 15 mins
Speaker: Anja Gengyo (NRI Initiative Coordinator, United Nations IGF)
The Inaugural Keynote was delivered by Ms. Anja Gengo, NRI Initiative Coordinator, United Nations Internet Governance Forum, where she highlighted the potential of the Youth IGF and its role in imparting the necessary knowledge and skills for capacity-building to create a safer, open and accessible Internet for all. Anja further spoke about IGF 2022 and ways for the delegates of Youth IGF to contribute.

Session Title: Welcome Address
Session Duration: 15 mins
Speaker: Ihita Gangavarapu (OC, Youth IGF)

The event commenced with the co-founder, Ihita Gangavarapu welcoming the fellows and participants to the forum. She shared the purpose behind starting Youth IGF and the objectives of the initiative. She introduced the advisory committee members, organizing committee members and the fellows.

Session Title: Internet Governance 101
Session Duration: 30 minutes
Speaker: Ms. Amrita Choudhury (Director CCAOI, UN IGF MAG Member, Chair APRALO) and Mr. Anupam Agrawal (Convener - ISO JTC 1 Advisory Group - Outreach at TCS)
Rapporteur: Purnima Tiwari (OC, Youth IGF)
The session was a fireside chat and was an interactive session. Ms. Amrita and Mr. Anupam unpacked the various dynamics of IG. The session helped the participants understand the origins of the concept of Internet governance from WSIS. The discussion threw light on the evolution of the Internet and the ideas that led to adoption of a multi-stakeholder model in the space of Internet governance. The speakers also gave an understanding of the key IG concepts and discussed them in an Indian context.

To make the session more interactive, they encouraged participants to share their opinions/perspectives on internet governance. To make the session more engaging, Mentimeter, a real-time feedback platform was used.

Session Title: Sustainability Through Data Governance
Session Duration: 45 minutes
Speaker: Purnima Tiwari, Atif Mohammad and Shradhanjali Sarma (OC, Youth IGF)
Rapporteur: Ihita Gangavarapu (OC, Youth IGF)
It was an interactive session with active engagement of the participants. The participants were divided as representatives of three (3) key stakeholder groups i.e. civil society, private sector and government. They were asked to share their views on a problem statement. The problem statement was structured in a manner so as to understand how the stakeholders approach the concept of sustainable data governance. The speakers introduced the concept of sustainable data governance in brief and explained the structure of the session, which was to be in workshop mode. The questions based on stakeholder groups were as under:

Questions for Government

a. Citizen data is collected for welfare schemes and for providing citizen-centric services. How do you think the Government can contribute towards sustainable data governance practices?
b. How can the Government regulate data governance practices for the private sector to prevent breach of personal data?

Questions for Private Sector

a. How can data governance, a digitalization construct built on the accountability approach, be combined with the sustainability assessment process to further improve the accountability of a business?
a. how do companies communicate their digitization efforts to strengthen sustainability reporting, the ultimate outcome of the sustainability assessment

process, ultimately increasing their accountability to stakeholders

Questions for Civil Society

a. How do you think civil society can contribute towards building sustainable data governance practices?
a. Can you suggest ways to do it?

After the ideation, the three (3) groups came up with their responses. The representatives of the private sector discussed the importance of self-regulation, creation of a charter on privacy and incentivizing privacy of user data. The representatives of the civil society group raised the fact that the consent collected from the citizen's should be multi-fold, with clear focus on terms and conditions. The representatives of the government group shared on how the digital economy poses a challenge and how the government needs to improvise in terms of their understanding of user data.

Session Title: Emerging Technologies: Challenges and Way Forward
Session Duration: 30 minutes
Speaker: Ms. Rama Devi Lanka, Director, Emerging Technologies, Government Of Telangana
Rapporteur: Samriddhi Kumar and Tathagat Sarma (Fellows 2022)

The session focused primarily upon identifying emerging technologies, the ways in which they have been deployed by State functionaries, in addition to the ways in which they could be capitalized by a nation like India. The discussion and the follow up questions related primarily to the uses of technologies like blockchain, and the challenges that they pose for regulatory framework, and governance modules in a democratic society. Ms. Lanka, through her answers presented a balanced framework for use of such technologies, through her experiences with the Government of Telangana.

Ms. Lanka began the session by stating that she felt that the focus should be more on opportunities instead of the challenges. Some of the significant points that she covered are:

» Defined what necessarily means by the phrase 'emerging technologies', especially the relevance of the same to the youth populace.
» The room, which represents a miniscule of India, is relevant to the discussion surrounding emerging technologies, since it has the potential to increase opportunities in leaps and bounds, especially for students.
» India, being in the midst of the 4th Industrial Revolution i.e. Digital Revolution and being at the top of its game with respect to Information Technology, it faces the pertinent question regarding how to capitalize the same.
» In 10-20 years down the line. AI, Blockchain, Cloud, Robotics and several others will be instrumental in aiding business efficiency, delivery and outcome.
» However, the emerging technology is focused towards social good, impacting the lives of millions. This is also evidenced by Sundar Pichai's investment of 75 Billion Rupees setting up the 'Google for India Digitisation Fund', which he feels is not just a solution for India, but a global solution.

She highlighted the areas on which the Government is currently focusing with respect to tech. The areas are:

- Agriculture: Given that agriculture is a primary sector and a largely unprofitable sector today, an important consideration arises regarding deploying emerging technologies to increase productivity during the lifecycle of the crop. One of the ways to achieve the same has been done by using AI to detect the onset of pests early.
- Healthcare: Emerging Technology in Healthcare is currently attempting to bridge a gap that has occurred due to the shortage of doctors and the skewed doctor to patient ratio. This includes deployment of AI to detect Cancer, Telemedicine and Online Accessible Consultation.
- Education: The setbacks that education has suffered as a whole due to the pandemic, necessitate the urgency for personalisation of education. Emerging Technology can play a pertinent role in addressing the same.

She also discussed how India shall require emphasis and investment on emerging tech based entrepreneurship and research, akin to how China has been able to emerge as a leader in AI Research across the world. This allows them to have larger datasets to test with. For India to emerge as a product nation, areas such as space tech need to be provided a boost. This area has also witnessed the emergence of startups, such as Dhruva and Skycon.

She discussed about some Challenges that Emerging Technologies faces, notably -

- Since Tech is constantly evolving exponentially, the learning required is also exponential.
- The inability of the government to regulate cryptocurrency is also a growing concern.
- The real-life biases being percolated by AI, for e.g. Amazon offering discounts in white-dominated areas, assuming that persons of color cannot afford the products being sold.
- Given that this is India's Century, a renewed focus towards emerging tech is necessitated.

Some of the key takeaways of her session were:

- India needs to provide impetus to arenas of emerging tech, such as space tech.
- The deployment of tech for social good has the power of transforming the lives of millions and creating a plethora of opportunities.
- Healthcare, agriculture and education have emerged as the key areas of focus for deployment of emerging tech for the Government.
- Research and entrepreneurship needs to take a front seat, and India needs to invest heavily in the same.
- Given the era of rapid tech innovation, the learning also has to grow exponentially.
- Blockchain technology is being utilized to address problems of the common citizenry, unlike what it was actually envisioned for.

Session Title: Crypto And Blockchain: Regulations And Opportunities
Session Duration: 25 minutes

Speaker: Satish Babu, At-Large Advisory Committee (ALAC) ICANN, President InApp Infotech
Rapporteur: Yaqoob Alam and Rashmi Ranjan Pani (Fellows, 2022)

The session addressed the following:

- What is Blockchain: A blockchain is a distributed database or ledger that is shared among the nodes of a computer network. As a database, a blockchain, stores information electronically in digital format. Blockchains are best known for their crucial role in cryptocurrency systems, such as Bitcoin, for maintaining a secure and decentralized record of transactions. The innovation with a blockchain is that it guarantees the fidelity and security of a record of data and generates trust without the need for a trusted third party.
- Demand of Blockchain in India: In the coming days, blockchain technology is sure to become a gamechanger for India. It will help in revamping and removing all the major problems in most of the essential services provided by the government. As per predictions, blockchain technology is all set to become a massive $176 billion business by 2050.
- DSRBT- Driving Safety Reward based on Blockchain Technology: The driver safety is given an utmost importance in the Transportation system. Road safety is mostly dependent on the drivers on the road and their behavior.
- Crypto & Blockchain: The Cryptocurrency and Regulation of Official Digital Currency Bill, 2021, is under review and likely to be tabled in Parliament shortly. The contours of the bill are not public yet. However, market commentary suggests that it will permit the issuance of a central bank digital currency (CBDC) and the use of blockchain and distributed ledger technology that underlies a cryptocurrency. As for private digital currencies, recent comments by finance minister Nirmala Sitharaman indicate that rather than an absolute ban, there may be experimentation, exploration, and encouragement of the emergent technology behind these.
- CBTC: In the existing Communication Based Train Control (CBTC) system, there are many information security threats especially in train-ground communication, for which information security protection methods of the CBTC system are designed. For increasing information security, blockchain technology is used to train on-ground communication of CBTC systems. Based on blockchain technology, CBTC system information security testing environment is set up. Testing results demonstrate that the train-ground communication information security of the CBTC system based on blockchain overcomes the single-point failure of centralization key management and doesn't influence the real time of CBTC system.
- Current Stake on Blockchain & Crypto: As per the Finance Bill, 2022 (“2022 Bill”), consequent proposed amendments to the Income Tax Act 1961 (“IT Act”) have been made wherein inter alia income arising from transfer of virtual digital assets (cryptocurrencies and NFTs) shall be taxed at the rate of 30%. In the 2022 Budget, by way of the 2022 Bill, the definition of virtual digital asset has been introduced to set the regulatory machinery in motion with respect to all cryptocurrencies and NFTs. The government has retained the power to classify or declassify any cryptocurrency and/or NFT from the casting net of this definition. This saving

provision is inserted potentially to avoid India's Digital Rupee or Central Bank Digital Currency ("CBDC") i.e. the proposed digital currency to be introduced by the Reserve Bank of India ("RBI") being made a subject of tax/ regulation under the 2022 Bill.

» Micro Lending: Blockchain technology has proved its disruptive potential beyond cryptocurrencies and is finding its applications across industries. Multiple use cases are available in the financial sector which leverage Blockchain and smart contracts. Blockchain based transactions come with promising features such as low cost, high speed, transparency, and security, and have driven the attention from many solution providers for designing Blockchain based payments solutions.

Some of the key takeaways of the session were:

» Blockchain is one of the fastest-growing skill sets with jobs in this domain growing at a mindblowing rate of 2,000-6,000%.
» Blockchain technology provides a decentralized, vigilant, time stamped, immutable and consensus-based data storage for the stakeholders.
» To promote entrepreneurial development and involve premier research institutions, Blockchain technology stack may be collaboratively evolved by involving various stakeholders from Government, premier research institutes, start-ups, and industry.
» Advanced research may be focused upon in the domain of Blockchain technology and various challenges in adopting the technology towards building a trusted public digital platform may be addressed.
» Standardization across the various layers of Blockchain technological stack and applications should be considered as one of the important activities in the framework development.

Session Title: Understanding Core Internet Infrastructure And Functioning
Session Duration: 40 minutes
Speaker: Srinivas (Sunny) Chendi, Senior Advisor, Policy and Community Development, APNIC
Rapporteur: Manogna Atkuru and Saiyam Bukurchunde (Fellows, 2022)

The session began with the introduction of internet functioning and infrastructure. The session was made interactive through a roleplay activity, where the teams were divided into three i.e. consumers, internet service providers, and the government. The teams were given charts to highlight their respective stakeholders' essential aspects. For instance, the consumer team pointed out the necessity of a router, wireless devices, and an Internet Service Provider (ISP) as crucial for them to connect to the internet. Similarly, other teams shared aspects that they felt were crucial based on the stakeholder group that they belonged to. Through this roleplay, Mr. Chendi discussed the entire internet functioning chain. He explained how the internet works and the basic tenets of the internet. Some of the significant aspects covered during the session are as under:

1. For any stakeholders to use the internet, they need wired devices, wireless devices and internet service providers. DNS (Domain Name System) is a translation

technology that converts users' IP addresses into accessible and readable hostnames without memorizing complex IP addresses. For example - In 'Google.com.', the dot at the end represents a root server where all the entries of the domains exist. This root answers all the queries.

2. Generic Top Level Domains - Top Level Domain (TLD) accesses the string '.com.' and identifies the website's content. The Second-Level Domain (SLD), accesses the string 'Google' and distinguishes one website from another. The preferences are first from root (the . at the end) to com to Google.

3. Internet Protocols: These are standardized protocols used to connect different types of computers by formatting them in such a way they can communicate with each other. Internet Protocols are used to send packets from one network to another. Transmission Control Protocol (TCP) is used for sending packets in a specific order. There are three IP addresses: IPV4, IPV6 and ASN (Autonomous System Number), used for ISPs.

4. IPV4 is a 32-bit integer that can be expressed as a valid IPV4 address in a dotted-decimal notation. This has 4.3 billion possible addresses. IPV6 is a 128-bit address with a possibility of 340 undecillion addresses. Autonomous System Number allows all systems to exchange routing information over the internet through Internet Service Providers (ISPs).

5. Internet Service Provider: Through ISP, customers gain access to the internet and these providers handle the traffic between different users. There is a need for a router that acts like a post office and routes information to ISP.

6. There has slowly been a shift from the internet for humans to the internet for devices with an increase in devices per person and in households.

Some of the key takeaways of the session were:

- Functioning of the internet involves stakeholders like consumers, Internet Service Providers (ISPs), Government, etc.
- To access the internet, DNS makes it easy for accessing an IP address and internet protocols make a standardized way to communicate with different types of devices.
- Internet Service Providers (ISPs) help users access the internet and handle the traffic.
- An effective functioning of the internet requires the coordination and cooperation of major three stakeholders namely : Government, ISP and consumers.
- All the three stakeholders are intricately interlinked to each other thus policy making and regulation becomes difficult and complicated.
- Most of the physical internet infrastructure is laid under the ocean through optic fiber cables.

Session Title: Digital Inclusion and Accessibility
Session Duration: 40 mins
Moderator: Purnima Tiwari (OC, Youth IGF)
Panelists: Dr. Bhagwan Chowdhry (Professor of Finance, Indian School of Business) and Mr. Osama Manzar (Founder & Director at Digital Empowerment Foundation)
The session started with Mr. Osama Manzar stating how the pandemic is a wake-up call for India in digital inclusion. Most people are not connected to the internet and out of 1.4 billion people in India, 700 to 800 million are not connected to the internet.

He defined 'meaningful connection' and stated that a meaningful internet connection is one that is stable, proper and operates without buffering. In India, at least 60-70% are not "meaningfully connected". Smartphone connectivity in India is 500 million in urban areas. In rural areas, the connectivity is 200 to 250 million, out of an user base of 700 million.

He also stated that the definition of an internet user is counter productive as it defines an internet user as a person who uses the internet for 2 hours a day.

He also brought attention to the fact that dependence of livelihood on the internet like biometric authentication for welfare and ration increased drastically in the last few years. However, he also pointed out that 320 million students attend school in India, but more than 80% of children do not have a device or internet to connect to. This speaks volumes about the online classes during COVID for underprivileged students.

Lately, he stated that there is still a long way to go for policies to become non-exclusionary. The need of the hour is to design policies for subsidizing internet, devices, internet access points in village hotspots and providing broadband connectivity to schools.

Dr Bhagwan Choudhury stated that complete financial inclusion is an illusion in India. The ground reality is very different from what is claimed. He stated that most banks are unwilling to open accounts for the poor, as the "Jan-Dhan accounts" are not profitable for banks.

He stated that there is no denial that a lot of work has been put into building the digital infrastructure in the last few years. However, last mile connectivity is still a problem. Lives of upper and middle classes have become easier with digital payment and UPIs, but it is still difficult for the poor to have access to digital infrastructure.

Lastly, he provided a few policy solutions which are as under:

- Ease of using technology should improve.
- Young women should be given access to the internet. These women should function as movable internet access with a built-in helper. This could help tackle the issue of lack of smartphone or internet penetration. Grievance redressal should also be included regarding digital payments.
- Inclusion comes with sharing and accessibility can be increased by sharing of resources, He cited an example from the 70s, when hardly anyone had TVs, but many people had access to them because they shared with each other.

Session Title: Cybersecurity And Online Safeguards: An Open Letter For Greater Online Security
Session Duration: 45 minutes
Speaker: Shri. Narendra Nath, Joint Secretary (National Security Council Secretariat) and Dr. Sriram Birudavolu CEO - Cyber Security Centre of Excellence DSCI (A NASSCOM Initiative)
Moderator: Ihita Gangavarapu (OC, Youth IGF)
Rapporteur: Karthik Nagapuri and Adhiraj Gupta (Fellows, 2022)

The panel discussions were focused on growth in the cybersecurity domain, employment rate in the industry and the challenges around the data and privacy. Dr.Sriram touched upon some critical points on internet security and decentralization of the internet. He stated that there is a need for value change in the perspective of the public and that of cyber professionals. He stated that, nowadays sharing of data is easy, and therefore security is an issue over the Internet. He cited the example of China Social Score, where citizens are assessed for trustworthiness along with companies.

On the question regarding the Indian landscape of cybersecurity, Mr. Narendra Nath stated that India is one of the top three nations in cyberspace. He stated that the critical infrastructure built for different sectors such as telecom, aviation, banking and finance, and health are a help in protecting from cyber attacks.

He stated that when we look at the term cybersecurity, we often interpret it from the perspective of 'protection' and 'user experience'. However, in cyberspace, we have state and non-state actors, where state actors include countries in disrupting data and information. The non-state actors participate in financial fraud.

Some of the key takeaways were:

- Shortage in talent in cyberspace
- One should have fundamental knowledge in protecting self
- India needs to focus on building critical infrastructure in cyberspace
- Need of experts in this field
- Endless opportunities in cyberspace

Way Forward

- Contributions to the national IGF: India IGF 2022 through inputs on agenda, theme and conducting workshops
- Collaborations with regional youth IGFs
- Work towards making the annual forum more inclusive and relevant for youth and India

Annexure 1

Brief Overview of our Sponsors/Partners/Supporters

1. **inSIG**: Aims to build a community of IG professionals in India as well as in the broader South Asia region of Asia-Pacific, who can effectively participate in global Internet Governance processes
2. **ISOC, Hyderabad Chapter:** The ISOC-Hyderabad-Chapter is a platform to discuss information related to technical development, Internet Governance, policies, research documents or surveys etc. both from national, regional or global perspectives
3. **UN IGF:** Internet Governance Forum (IGF) serves to bring people together from various stakeholder groups as equals, in discussions on public policy issues relating to the Internet
4. **FirebirdVR:** Firenest Reality Consulting Private Limited, represented as the brand "FirebirdVR", is India's leading Virtual Reality (VR) and Augmented Reality (AR) company. FirebirdVR vision is to be the world's largest enabler of immersive technology solutions across multiple industries.
5. **audius:** audius is a leading medium-sized IT and software company. Founded in 1991, the company currently employs ca. 600 people at 21 locations worldwide. The Audius group consists of 14 subsidiaries operating in the areas of IT services, software and network/mobile.
6. **Software Freedom Law Center (SFLC):** SFLC is a legal services organization that brings together lawyers, policy analysts, technologists, and students to protect freedom in the digital world.
7. **Centre of Excellence, DSCI (NASSCOM):** The Cybersecurity Centre of Excellence (CCoE) is a glocal hub based in Hyderabad to catalyse innovation, entrepreneurship and capability building in cybersecurity and privacy. It is a joint initiative of the Government of Telangana and DSCI setup to fulfil DSCI's commitment towards creating a safe, secure and a trusted cyberspace.
8. **OSDG, IIIT Hyderabad:** The Open Source Developers Group at IIIT Hyderabad is dedicated to helping student developers improve their skills and contribute to the open-source community in a multitude of ways. Officially, it falls under the Center for Open Source at IIIT-H and is a completely student-run organisation.

Annexure 2

Gallery

The complete photo gallery from Youth IGF India 2022 event can be found here.

YOUTH IGF INDIA