



Humanitarian Activities
Committee

IEEE HAC First Quarter Report 2021

IEEE HAC Inspires, Connects, and Empowers IEEE Volunteers

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Sustainably Speaking: A Note from the IEEE HAC Chair

Celebrating Record IEEE HAC Accomplishments from January – March 2021

Dear IEEE Colleagues,

It is with great pleasure that I address you in the first-ever IEEE Humanitarian Activities Committee (HAC) Quarterly Report. These reports will be an ideal mechanism to convey significant HAC achievements throughout the year and facilitate greater collaboration across IEEE so that more members can take part in high impact humanitarian and sustainable development opportunities.

I am excited to share at the end of the first quarter, IEEE HAC/SIGHT have already established two new benchmarks that are the highest since inception. In February, individual SIGHT membership surpassed the 15,000 milestone. Today, we have more than 16,000 members who live in 118 countries and all ten IEEE Regions. There are also 178 SIGHT Groups in 53 countries that have been formed by volunteers committed to using technological solutions to make positive changes in their communities.

The other record was set for the number of project proposals submitted. IEEE members submitted 156 proposals from 34 countries and five IEEE Regions to the IEEE HAC/SIGHT Call for Proposals Focused on COVID-19 Response, an increase of 33% in comparison with the second IEEE HAC/SIGHT Call for Proposals in 2020. IEEE HAC funding opportunities are reaching across the breadth and width of IEEE - 74% of proposals were submitted from IEEE members with connections to IEEE Societies, Student Branches, Women in Engineering or Young Professional Affinity Groups, or SIGHT Groups. HAC members are currently determining which ones are candidates for funding, to continue empowering IEEE volunteers in their COVID-19 response through the rest of 2021.

Both new records reflect the extent to which members are interested in engaging in humanitarian activities with IEEE and supporting their local communities through the difficult times of a global pandemic.

IEEE HAC has made great strides this quarter in collaborations within and beyond IEEE. We have engaged with IEEE Societies, IEEE Regions, IEEE Programs and Affinity Groups, and external organizations via project co-funding programs, joint educational materials, outreach, and more. I invite you to continue reading the report to learn more about our efforts. This will be an important area that we will continue to highlight in future reports to ensure that more IEEE members can benefit from HAC's unique offerings.

Thank you in advance for your support of HAC endeavors. Together, we will foster technological innovation and excellence for the benefit of humanity.

Sincerely,

Sampathkumar Veeraraghavan, 2021 HAC Chair



HAC's Unique Offerings & Benefits

About the IEEE Humanitarian Activities Committee

The Humanitarian Activities Committee (H-A-C) provides leadership as well as a suite of resources that inspire and enable IEEE volunteers around the world to carry out and support impactful humanitarian technology and sustainable development activities at the local level.

HAC's work focuses on:

- Raising **awareness** – HAC provides programs that engage over 16,000 members in **118 countries** and all **10 IEEE Regions**
- Providing **training** – **400+ individuals** have participated in HAC/SIGHT courses on the IEEE Learning Network
- Supporting humanitarian technology and sustainable development **activities** – **156 project proposals** from **34 countries** received so far in 2021; **100+ awarded funding in 2020**
- Creating **sustainable development community** through collaborations within and beyond IEEE - Pilots in progress with IEEE Regions, IEEE Societies, other IEEE entities, and external organizations

Benefits to Engaging in Humanitarian Technology Activities with IEEE HAC/SIGHT

Training and
Awareness

Professional
Development

Greater
Purpose

Project
Funding

Connection to
a Global
Network

Sustainable
Development
Community

IEEE HAC Strategic Objectives and Major Programs

IEEE HAC Strategic Objectives & Major Programs for 2021

- Increase engagement with IEEE Societies: pilot **IEEE Society project co-funding program**
- Strengthen involvement with IEEE Regions: pilot **IEEE Region project co-funding program**
- **Activate partnerships with MGA, EAB, TAB, and Standards**: pilot joint strategic initiatives
- Host at least **two humanitarian technology and sustainable development project Calls for Proposals**
- Offer **professional skill development and education materials** on humanitarian technology and sustainable development topics
- Grow recognition of a **coordinated HAC/SIGHT Brand**
 - Host first-ever IEEE HAC Global Summit (virtual in 2021)
 - Launch IEEE HAC/SIGHT Sustainable Development Newsletter (achieved in January)
 - Publish IEEE HAC reports for the IEEE Board of Directors and other external stakeholders
- Lead **global collaboration efforts** with international agencies and industry: joint programs with United Nations agencies
- Implement **operational and process excellence** to align with best practices
 - Update the HAC Operations Manual
 - Formalize SIGHT Group Operations Handbook

IEEE HAC Collaboration Efforts from First 100 Days of 2021



EPICS IN IEEE



IEEE Region 2



IEEE Antennas and
Propagation Society



IEEE Region 5



IEEE Foundation



IEEE students

IEEE Societies Partnering with IEEE HAC/SIGHT – a Win-win Model

Individuals: Enrich their volunteer experience when they join a diverse community of locally-focused engineers to leverage technology for the benefit of those who need it most

Chapters: Develop engineering skills by implementing an IEEE HAC/SIGHT project to allow Society members to apply their engineering skills in real world, humanitarian technology and sustainable development settings

Society: Collaborate for exponential impact. Choosing to partner with IEEE HAC/SIGHT to jointly fund projects or rollout other initiatives means engaging existing members and creating a mechanism to attract potential members to get involved with Society activities.

“[EDS and HAC] jointly funded a very successful irrigation project in Nicaragua. Thanks to this partnership EDS was able to enhance the allocated funds and benefit from the vast expertise of HAC in managing projects and leveraging their local volunteer pool. It was a real win-win proposition that I can strongly recommend to other societies.” – *Fernando Guarin, IEEE Electron Devices Society (EDS) Past President, IEEE Fellow*





IEEE HAC/SIGHT Funded Project Spotlight: Automated and Sustainable Drip Irrigation System in Rural Nicaragua

One of the first examples of a HAC/SIGHT/Society joint-funding model

- In 2019, IEEE SIGHT provided co-funding together with the Electron Devices Society (EDS) to maximize impact on a project implemented in rural Nicaragua.
- The project has provided benefits to the local community of fifty families through job creation and fruit harvesting from a sustainable drip irrigation system installed at a community farm. This has spurred community empowerment, micro-enterprise business opportunities, and a unique educational model.
- Team members learned technical skills in the design and automation of a solar-powered drip irrigation system and IoT cloud applications, reinforcing member and student experience with IEEE.
- In 2020, EDS granted US\$25,000 to IEEE HAC/SIGHT in order to replicate the joint-funding model with other projects. This year EDS & HAC/SIGHT will partner to solicit, evaluate, and fund similar humanitarian technology activities.



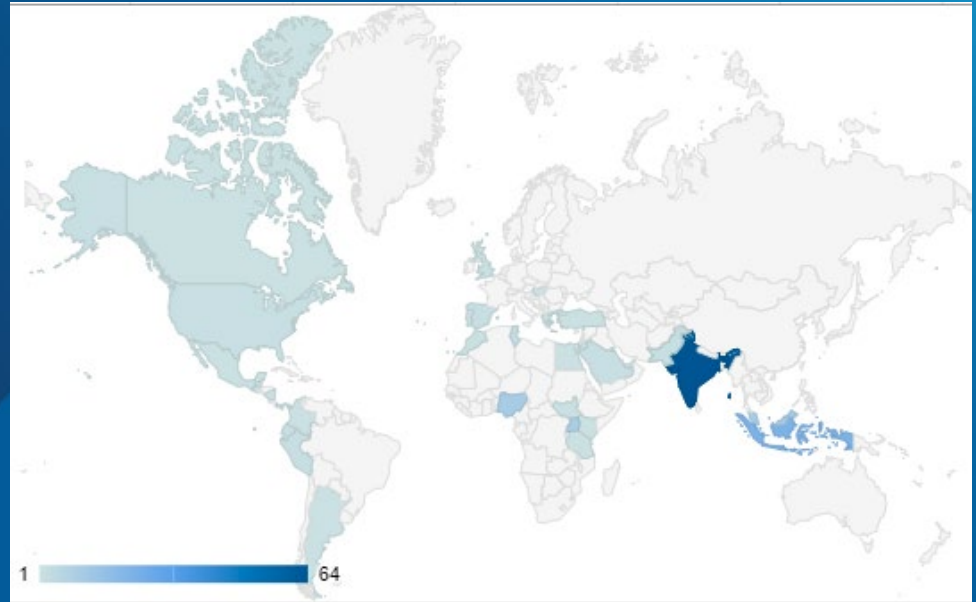
IEEE HAC First Quarter Highlights

Projects



2021 01
March Call for
Proposals

IEEE HAC empowers IEEE volunteers in their COVID-19 response: 156 proposals from 34 countries and five IEEE Regions

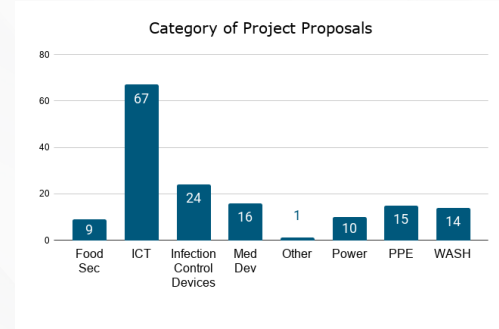
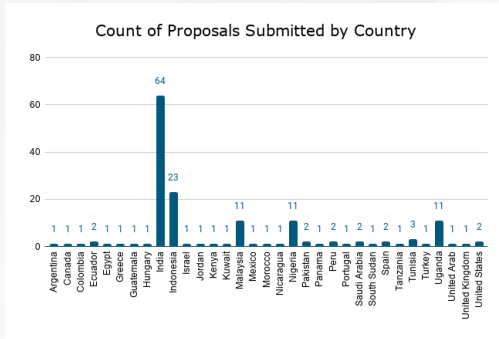




Record Response to IEEE HAC/SIGHT 2021 01 March Call for Proposals

- Call for Proposals Focused on COVID-19 Response
- Volunteers submitted a record high 156 proposals from 34 countries and five IEEE Regions, an increase of 33% from the second Call for Proposals related to the COVID-19 response in 2020
- 84 Proposals were submitted from volunteers affiliated with IEEE Societies*
- 45 Proposals were submitted from volunteers affiliated with IEEE Student Branches*
- 33 Proposals were submitted from volunteers affiliated with MGA Affinity Groups (YPs, WIE)*
- Currently being reviewed by HAC/SIGHT Projects Committee

**Some proposals are affiliated with two or more IEEE entities.*



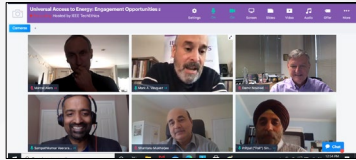
HAC increases understanding of the role of engineering and technology in sustainable development

Partnership



**picture from 2019*

HAC's Partnership Efforts Within and Beyond IEEE



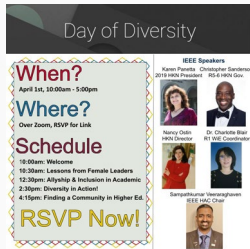
IEEE
TechEthics

- IEEE HAC Chair participated with IEEE TechEthics and United Nations Department of Economic and Social Affairs (UN-DESA) in an Engagement Opportunities and Policy Debate Roundtable for their event, “New Technologies, Ethics and Policy Engagement for Sustainable Development: Universal Access to Energy,” on 11 February.



IEEE Foundation

- HAC co-hosted panel during IEEE Sections Congress Virtual Training with the IEEE Foundation: “Ways to engage your Section in IEEE Humanitarian & Philanthropic programs” on 11 April, attended by 298 participants. Panelists included volunteer representatives from IEEE SIGHT, EPICS in IEEE, the TryEngineering STEM Portal, REACH, the History Committee, Life Members, IEEE Awards, and IEEE HKN.



- HAC Chair participated in a panel for the Day of Diversity in STEM event hosted by GWISE and IEEE Eta-Kappa-Nu (HKN)

IEEE SIGHT

Special Interest Group on
Humanitarian Technology



**Through its global network, HAC
creates impact in underserved
communities around the world**





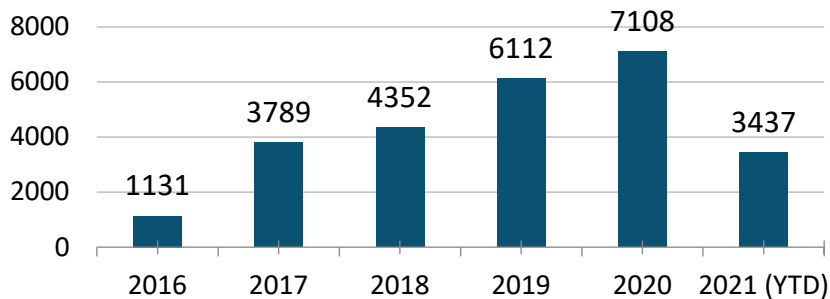
IEEE SIGHT – Continuing Strong Growth Trends

- IEEE SIGHT met and surpassed new milestone of 15,000 members in February 2021
- Ronny Cabrera from the IEEE Ecuador Section SIGHT Group was selected as the 2020 SIGHT Volunteer of the Year for his management and leadership that permitted the incubation of humanitarian technology and sustainable development projects in underserved communities in Ecuador, and the professional development of the SIGHT Group volunteers.
- The Nigeria Section SIGHT Group was selected as the 2020 SIGHT Group of the Year for its members' extraordinary work on humanitarian technology and sustainable development projects in 2020.
- Four new SIGHT Groups established in 2021:
 - Federal Univ of Campina Grande (UFCG) Student Branch SIGHT (Brazil)
 - Bule Hora University Student Branch SIGHT – this is the first SIGHT Group in Ethiopia!
 - North Jersey Section SIGHT (USA)
 - Fort Huachuca Section SIGHT (USA)
- SIGHT Groups set up as organizational units in IEEE's internal database – Chairs will be using vTools to report events and officers
- Second annual IEEE SIGHT Day to be held on 28 April

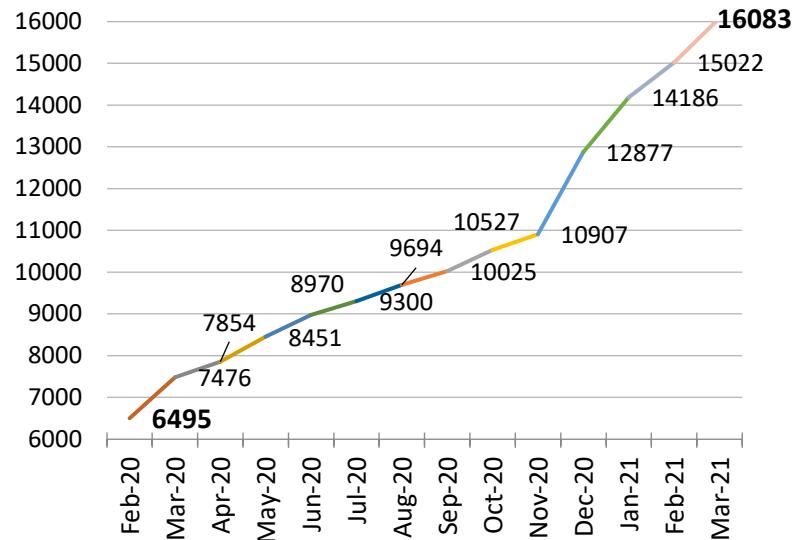


SIGHT Membership – Indicators of Engagement and Growth

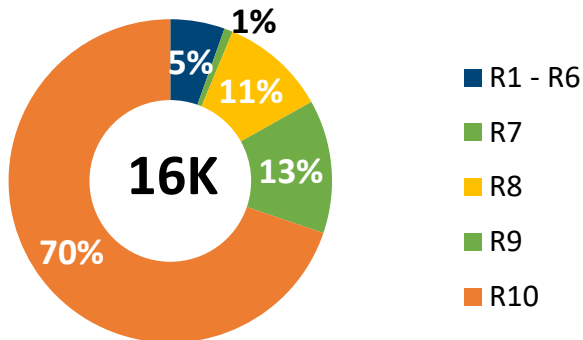
New SIGHT Members by year



SIGHT Membership Growth Year over Year



Active Members by Region



What Volunteers are Saying About IEEE SIGHT

“After leading different HAC and SIGHT supported projects, I ascended to the position of Chair SIGHT Uganda Group. This involvement greatly improved my leadership skills and led me to become the current SIGHT Chair... I strongly encourage my fellow IEEE members to be involved in HAC/SIGHT activities which play a great role strengthening their leadership skills to take us forward in the various aspects of life that we need.” – *Lwanga Herbert, IEEE SIGHT Chair*

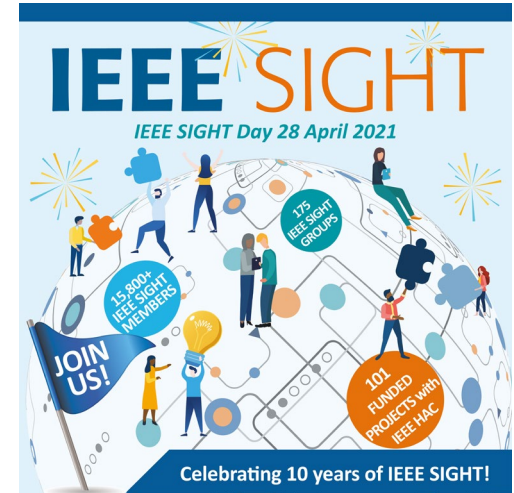
“The Humanitarian Activities and SIGHT Group project have served such an important and valuable role for us during this most challenging time. I wish to express my personal gratitude and to pass along the sentiments expressed by many who have been participating. We are most grateful to be able to participate in a meaningful humanitarian dialogue that elevates our personal experience and provides us with an opportunity to make a difference.” – *Dr. Katherine August, IEEE New Jersey Coast Section SIGHT Chair*

“This project [*referring to a project that IEEE SIGHT funded*] has had an impact at the local and national level to a point of being shared in national media, mainly [*focusing*] on what the internet network has done for students during the context of the COVID-19 pandemic. This has generated that at least fifteen organizations and municipalities in the country have contacted IEEE Ecuador to show their interest in replicating this type of solutions in their communities. We appreciate the support of the IEEE SIGHT Committee for allowing our volunteers to participate in this type of project and for allowing the financing of this project that has benefited students and teachers from the Nabon community, but above all allowed new initiatives to exist so that this type of solution becomes a reality in Ecuador.” – *Ronny Cabrera, IEEE Ecuador Section SIGHT volunteer*

Looking Ahead to the Second Quarter

Join us for 2021 IEEE SIGHT Day Activities!

- Theme: Celebrating 10 years of IEEE SIGHT
- Date: 28 April
- Purpose: IEEE SIGHT Day is organized to foster a spirit of community for the global SIGHT network, increase awareness of IEEE SIGHT within IEEE, promote the opportunity to support SIGHT financially, and celebrate the impact SIGHT volunteers and groups are making
- Ways You Can Get Involved
 - Promote IEEE SIGHT Day activities by sharing with your networks and members
 - Attend the sessions as you are able
 - [Support IEEE SIGHT financially](#) with a charitable gift - Make your donation of US \$10 to celebrate the 10 years of IEEE SIGHT
 - Share a SIGHT memory! (*short video clip with how you first learned about IEEE SIGHT, or how you have been involved*)



sight.ieee.org/events/ieee-sight-day/

Achieving Shared Goals Through Partnership

Working groups with representatives from HAC and IEEE Societies, Regions, IEEE OUs, and external organizations are currently defining plans for collaborative engagement. These initial partnership efforts will be coming to fruition in the coming months, and news of further developments will be shared in the next quarterly report.

If you have an idea for how your Region, Society, or other IEEE OU can partner with IEEE HAC, write to hac-office@ieee.org.

IEEE HAC/SIGHT In the News

- IEEE Technical Community Spotlight, “[Joint-funding program fuels partnership in HAC and EDS](#)”
- Congratulations Kartik Kulkarni, one of the first Chairs of IEEE SIGHT and current Immediate Past Chair of IEEE HAC on being selected as this year’s recipient of the annual IEEE Theodore W. Hissey Outstanding Young Professional Award. See [the article on Kartik’s volunteer history](#) on IEEE Spectrum. Sampathkumar Veeraraghavan, past SIGHT Chair and current HAC Chair, was last year's recipient of the IEEE Theodore W. Hissey Outstanding Young Professional Award.
- In 2020, Dr. Diana Purwitasari and her team of volunteers received HAC/SIGHT funding to address the COVID-19 situation in their local community through the project “Web-based Application for Tracing COVID-19 in East Java Province, Indonesia.” The project team, faculty members of the Sepuluh Nopember Institute of Technology (ITS), successfully developed a mobile version of the East Java Provincial Health Office’s COVID-19 monitoring website. If you would like to learn more about this project, see the article on the [ITS website](#).

Thank You

