

#### **IEEE HAC Second Quarter Report 2021**

IEEE HAC Inspires, Connects, and Empowers IEEE Volunteers

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Humanitarian Activities Committee



# **Sustainably Speaking: A Note from the IEEE HAC Chair**

#### Celebrating IEEE HAC Accomplishments from April – June 2021

#### Dear IEEE Colleagues,

Greetings! I'm pleased to share the second quarterly HAC report of 2021. HAC is poised to deliver record-breaking growth this year and has made significant progress so far. Some of the key highlights from this quarter include the record SIGHT membership of more than 18,200 members and 185 SIGHT Groups, an all-time high of 212 project proposals received in the first half of the year, the launch of unique partnership programs with IEEE Organizational Units (OUs) and external organizations, and the program to allow IEEE members to contribute as HAC/SIGHT project reviewers.

In the past months, HAC established partnerships and novel initiatives to increase engagement with and grassroots opportunities for IEEE members. HAC launched a trailblazing joint funding program with IEEE Regions to empower local volunteers to develop meaningful solutions to critical needs and pandemic-related challenges with a successful pilot in Region 10. HAC launched a partnership program with the IEEE Electron Devices Society (EDS) focusing on sustainable projects that utilize EDS-relevant technology to address local community challenges. In this report, you will learn more about the ongoing collaborations with IEEE Women in Engineering (WIE), IEEE-USA Community Outreach (MOVE), IEEE Entrepreneurship, IEEE Foundation, IEEE Eta Kappa Nu (HKN), and IEEE Societies like Microwave Theory and Techniques Society (MTT-S), Antennas and Propagation Society (AP-S), and Power Electronics Society (PELS). Another major highlight from the quarter is the first-ever HAC side event at the Science, Technology and Innovation (STI) Forum organized by the United Nations. These strategic partnerships uniquely position HAC to strengthen IEEE's role as a world leader in the sustainable development space.

I'd like to extend a sincere thank you to those who joined SIGHT Day activities to celebrate the SIGHT 10-year anniversary, and especially the donors who supported SIGHT financially (through the IEEE Foundation). With this occasion, we can reflect on how HAC and SIGHT have developed over the years to offer IEEE members a variety of transformative opportunities to get involved in sustainable development. This journey was made possible by the tremendous support and encouragement from the current and past IEEE Boards of Directors, all IEEE partnering programs, HAC and SIGHT volunteers, and, most importantly, their local communities. Looking to the future, I feel confident that together as a team we can build a better tomorrow for marginalized communities around the globe.

Stay safe and healthy, Sampathkumar Veeraraghavan, 2021 HAC Chair





## IEEE HAC Strategic Objectives and Major Programs





#### **IEEE HAC Collaboration Efforts from the Second Quarter**





#### **IEEE HAC & IEEE Region Collaborations**

- HAC is rolling out joint programs with IEEE Regions: the first pilot was held with IEEE Region 10 to hold a special Call for Proposals for IEEE members in Region 10.
- This is the first time HAC has collaborated with an IEEE Region to offer a joint funding program.
- "Addressing Local Needs During COVID Time" was designed to support meaningful humanitarian technology and sustainable development activities, foster the development of IEEE relationships with communities and stakeholders at the grassroots level, and incubate a geographically diverse selection of innovative prototypes that could potentially be scaled up in the future - all with safety as the highest priority.
- 56 complete proposals from seven countries and seventeen IEEE Sections were received. The volunteer teams of the 27 proposals awarded funding will be constructing their prototypes from July – December 2021.

### This program establishes a customizable model for HAC collaboration with every IEEE Region.



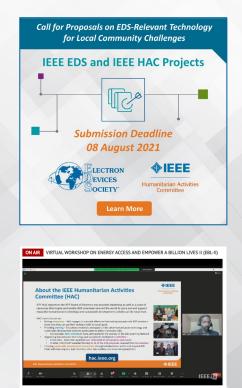
"Collaboration and teamwork have great potential in maximizing resource utilization. The IEEE Region 10 and IEEE HAC Special Call for Proposals was a great, successful model." – *Deepak Mathur, IEEE Region 10 Director 2021-2022* 





#### **IEEE HAC & IEEE Society Collaborations**

- HAC is fostering stronger collaboration with IEEE Societies to build complementary avenues to engage with Society members and utilize best-in-class technology to address sustainable development challenges.
- The IEEE Electron Devices Society (EDS) and HAC are conducting a special Call for Proposals through 08 August to support projects in EDS chapters that utilize EDS-relevant technology to address local community challenges. Proposals must present a convincing plan to a) understand the real needs of a local community or local stakeholder organization and b) complete in no more than six months' time a pilot project utilizing EDS-relevant technology to address those local community challenges. Visit the HAC website to read the Call for Proposals for more details.
- The HAC Panel "IEEE HAC Delivering Impactful Member Experience Through Collaboration" held during 2021 SIGHT Day focused on how partnerships across IEEE can enrich the member experience. Panelists from the IEEE Antennas and Propagation Society (APS), IEEE Microwave Theory and Techniques (MTT-S), IEEE Electron Devices Society (EDS), and IEEE Entrepreneurship shared their experiences collaborating with HAC. See session highlights on the <u>HAC website</u>.
- HAC Chair presented on the social impact of humanitarian engineering programs during the pandemic at the IEEE EDS <u>Latin America Electron Devices Conference</u> and the IEEE Microwave Theory and Techniques (MTT-S) Chapter Chair meeting.
- HAC Chair and SIGHT Chair were panelists for the IEEE Virtual Workshop on Energy Access and Empower a Billion Lives II, organized by the IEEE Power Electronics Society (PELS).





#### **IEEE HAC & IEEE Entity Collaborations**

- HAC had the opportunity to host a General Session at the June IEEE Board of Directors Meeting Series, "IEEE Humanitarian Activities Committee/SIGHT 2020 COVID Projects Program." The session highlighted how HAC engages and empowers IEEE members at the grassroots level through sustainable development and humanitarian activities in the time of COVID-19.
- The HAC Chair joined IEEE Eta-Kappa-Nu (IEEE-HKN) on an edition of The HKN Connection podcast to share about how HKN members can get involved with HAC/SIGHT. The session recording is available on the <u>HKN podcast website</u>.
- HAC is working closely with the IEEE Women in Engineering (WIE) Committee on a joint pilot program to engage ten WIE chapters this year.
- HAC/SIGHT have contributed communications content for IEEE impact themes that has been shared in an IEEE Transmitter article and on the IEEE Facebook page. (More information and links on slide 33)
- HAC started a Disaster Management working group that includes representation from the MOVE program.





Environmental Technology Impacting the World for Good



## IEEE HAC Second Quarter 2021 Highlights



## Projects



Humanitarian Activities Committee

#### IEEE HAC empowers IEEE volunteers in their COVID-19 response





### IEEE HAC/SIGHT 2021 Calls for Proposals – Results and a New Opportunity



Visit <u>the HAC website</u> for the Call for Proposals

- Decisions have been finalized for the HAC/SIGHT Call for Proposals from 01 March. Of 156 proposals received, 24 have been awarded funding from eleven different countries and four IEEE Regions.
  - Canada
  - Colombia
  - Ecuador
  - Egypt
  - India
  - Indonesia

- Malaysia
- Mexico
- Nigeria
- Tunisia
- Uganda
- A second HAC/SIGHT Call for Proposals Focused on COVID-19 Response and Pressing Community Needs will be open from 12 July – 16 August.
- The Call will fund projects designed to address local realities of the COVID-19 situation, or other issues of pressing community need.
- Applications will be reviewed on a rolling basis.



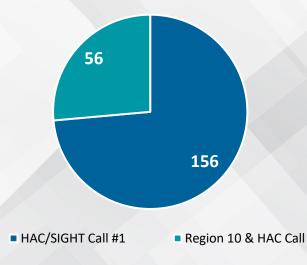


### Comparison of 2020 – 2021 HAC/SIGHT Calls for Proposals



\*This includes the 2021 HAC partnership programs

#### Total HAC/SIGHT Proposals Received 2021 Year-to-Date



**IEEE** 





#### **Engagement Opportunity – HAC/SIGHT Call** for Reviewers

- The HAC Call for Reviewers provides IEEE members with a way to contribute to HAC/SIGHT's important work in humanitarian technology and sustainable development.
- 60 individuals from nine IEEE Regions applied to <u>serve as an</u> <u>HAC/SIGHT project proposal reviewers</u>; those selected will begin to review proposals as soon as they are submitted.
- The HAC Education Committee held a training webinar for those interested; the recording is available on <u>the HAC</u> website.
- Reviewer applications are considered on a rolling basis; submit your application today or share with your networks as appropriate.







### 2020 Project Preliminary Assessment Information

"The impact we made as IEEE Volunteers will last forever"

Overall, through HAC COVID Grants in 2020:

- Over 30,000 individuals received PPE to protect themselves against COVID-19
- Over 1,000 individuals in Africa were trained to make locally sourced sanitizer and other PPE
- Eight prototypes were successfully built to increase safety measures and efficiency within hospitals
- Four regional tracking apps were built, providing crucial, accurate COVID-19 case information in real time
- Four digital literacy curriculums were created that will continue to be used to increase knowledge and skills
- Over 100 local partnerships were developed, and success stories were shared by over half the projects through local news channels, newspapers, and various social media platforms
- 80% of IEEE Member project leads reported that their project met local needs as confirmed by locals, was realistic and addressed the full complexities of the population served and considered possible risks comprehensively and planned accordingly.







#### **IEEE**



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



\*picture from 2019

### Partnership





#### **HAC's Partnership Efforts Beyond IEEE**



Science, Technology, & Innovation (STI) Forum Side Event hosted by the

IEEE Humanitarian Activities Committee (HAC)

Feet on the Ground: How to Connect with a Global Network of Local, Technically Trained Partners in the Time of COVID and Beyond



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*<b>♦IEEE* 

- HAC hosted its first-ever side event at the annual Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals (STI Forum) organized by the United Nations. The recording of the workshop, "Feet on the Ground: How to Connect with a Global Network of Local, Technically Trained Partners in the Time of COVID and Beyond" is available.
- HAC is organizing a panel, "Leveraging a Global Network of Technologists to Address Local Challenges in the Face of a Pandemic" at The Global Sustainable Technology & Innovation Community (G-STIC) Conference, focused on the acceleration of technological solutions for the SDGs. The panel will be held on 25 October.
- HAC is currently engaged with Ikala STEM, a non-profit association which aims to promote Science and Education in Madagascar and to raise the profile of Malagasy women in STEM, to determine possible avenues for collaboration.





#### **IEEE HAC Collaboration Efforts in 2021 So Far**





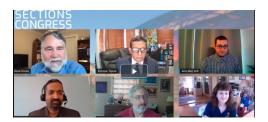
### HAC/SIGHT Bringing More Smiles & Opportunities for IEEE Members (2021 to date)



IEEE President Kathy Land joins HAC & SIGHT Chairs for 2021 SIGHT Day Opening Session



HAC joins IEEE TechEthics' event with the United Nations Department of Economic and Social Affairs (UN-DESA)



HAC co-hosted panel during IEEE Sections Congress with the IEEE Foundation



HAC hosted side event at the Science, Technology, & Innovation (STI) Forum organized by the United Nations



*"IEEE HAC Delivering Impactful Member Experience Through Collaboration" panel held for the 2021 SIGHT Day celebration* 



SIGHT held virtual networking sessions for SIGHT Groups for 2021 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 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 <u>hac-office@ieee.org</u>.



### **IEEE** SIGHT

Special Interest Group on Humanitarian Technology

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





**IEEE** 

Humanitarian Activities



#### **IEEE SIGHT – Celebrating 10 Years of IEEE SIGHT**

- IEEE SIGHT continues to set new records for the program with over 18,200 individual members as of 30 June 2021
- Eleven new SIGHT Groups established in 2021 in five different IEEE Regions and five different countries. These include the first SIGHT Groups to be formed in Ethiopia and Ghana.
- The second annual SIGHT Day was held on 28 April
  - At least 36 events and activities were held with over 1,500 participants from six IEEE Regions
  - Virtual event recordings can be seen on SIGHT website
  - <u>Share your IEEE SIGHT Memory playlist</u> on the HAC/SIGHT Youtube channel
  - First-ever SIGHT Group Socials were held as virtual networking sessions for IEEE SIGHT Group representatives with approximately 48 attendees. One attendant shared that they most liked, "the possibility to network with other SIGHT representatives around the globe and feel we are truly a community trying to achieve the same goals." 100% of post survey respondents are interested in attending similar events in the future.



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ticlChot | IEEE SIGHT Group Social - SIGHT Day 2021

IEEE SIGHT

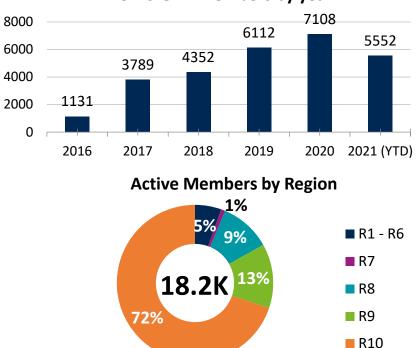
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#### SIGHT Membership – Indicators of Engagement and Growth

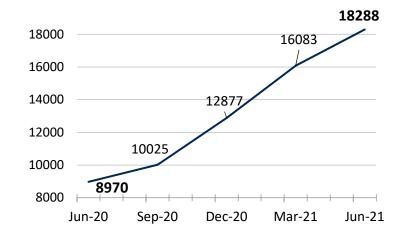


#### **New SIGHT Members by year**

#### **SIGHT Membership Growth Year over** Year (through 30 June 2021)

**IEEE** SIGHT

Special Interest Group on Humanitarian Technology



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## Looking Ahead to the Rest of 2021





# Funding Opportunities, Upcoming Events, and the HAC Global Summit

- 12 July the submission process for the <u>IEEE HAC/SIGHT Call for Proposals Focused on COVID-19 Response</u> and Pressing Community Needs opens.
- 08 August proposal submission deadline for the <u>IEEE EDS and HAC Special Call for Proposals</u>: EDS-Relevant Technology for Local Community Challenges.
- 16 August proposal submission deadline for the <u>IEEE HAC/SIGHT Call for Proposals Focused on COVID-19</u> <u>Response</u> and Pressing Community Needs.
- **26 August** HAC will host a keynote speaking session and workshop at the <u>IEEE PowerAfrica 2021 Conference</u>.
- 25 October HAC will host a panel, "Leveraging a Global Network of Technologists to Address Local Challenges in the Face of a Pandemic" at <u>The Global Sustainable Technology & Innovation Community (G-STIC) Conference</u>, focused on the acceleration of technological solutions for the SDGs.
- 10 November <u>IEEE HAC Global Summit</u> The first-ever IEEE HAC Global Summit 2021 will serve as a platform to bring together IEEE members, leaders from a variety of IEEE entities, and representatives from external partners in the sustainable development space to exhibit the breadth and width of HAC engagement, showcase grassroots HAC/SIGHT projects, and contribute to the global discussion on the application of humanitarian technology to address local challenges.

#### **Opportunities with HAC/SIGHT**

- Identify potential opportunities for partnership and joint programs
- Publicize HAC/SIGHT opportunities, such as the <u>Call</u> for Proposals and <u>Call for Reviewers</u>
- Add free <u>SIGHT membership</u> to your IEEE membership
- Form a SIGHT Group to assess needs in your local community, apply for financial resources, and implement a sustainable technological solution
- Take part in the free, online courses on the <u>IEEE</u> <u>Learning Network (ILN)</u> that equip participants with a basic understanding of humanitarian technology and sustainable development topics
- Read and share this report and the <u>HAC First Quarter</u> <u>Report</u>



Humanitarian Activities

Committee

#### IEEE SIGHT

Special Interest Group on Humanitarian Technology

Write to us with your ideas at hac-office@ieee.org



## **Thank You**





## Appendix





## HAC Unique Offerings & Benefits

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#### **About the IEEE Humanitarian Activities Committee**

The IEEE Humanitarian Activities Committee (HAC) 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 18,200 members in 119 countries and all 10 IEEE Regions
- Providing training 440+ individuals have participated in HAC/SIGHT courses on the IEEE Learning Network
- Supporting humanitarian technology and sustainable development activities 212 project proposals from 36 countries received so far in 2021; 51 projects awarded funding
- 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







#### **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 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 In the News**

- The work of IEEE HAC/SIGHT volunteers was highlighted throughout the <u>IEEE 2020 Annual Report</u>.
- IEEE Transmitter article, "<u>Environmental Technology Impacting the World for Good</u>," published on 22 April highlights two projects that were funded by IEEE HAC/SIGHT as part of an Earth Day campaign.
- The "IEEE COVID-19 Market Place Robot," a project undertaken by volunteers from the IEEE Nigeria Section and funded by IEEE HAC/SIGHT in 2020, was featured on the IEEE Facebook page on 27 May.
- The "Engineers Assisting Ventilator Maintenance" HAC/SIGHT 2020 funded project, undertaken by volunteers from the IEEE Rio de Janeiro Section, was featured on IEEE social media channels on 11 June.
- "Nabón, el cantón de Azuay con puntos Wifi en todas las comunidades rurales" in Primicias (Ecuador). This article is in Spanish, but we recommend translating to your local language to learn more about the impact of the SIGHT-funded project "Nabon Network Project" undertaken by the Ecuador Section SIGHT Group in 2019. After several months of operation, 12,000 inhabitants now have internet connectivity thanks to the network.

