

IEEE HAC First Quarter Report 2022

The IEEE Humanitarian Activities Committee (HAC) Inspires, Connects, and Empowers IEEE Volunteers

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IEEE

Humanitarian Activities Committee





Sustainably Speaking: A Note from the IEEE HAC Chair

Celebrating IEEE HAC Accomplishments from January – March 2022

Dear IEEE Colleagues,

It is a pleasure to share about the exciting beginning of 2022 for IEEE HAC/SIGHT! HAC has a unique value proposition for IEEE members and organizational units, and the results of many collaborations are highlighted in our quarterly reports. For those learning about HAC for the first time, I encourage you to read the IEEE Institute article - "<u>IEEE Humanitarian Program Sees Record Growth</u>," the 2021 IEEE HAC Annual Report, and the <u>IEEE HAC/SIGHT Success Story Portfolio</u> for information on the impactful work of HAC in 2021.

HAC accomplished much in the first quarter including a joint callfor proposals with the IEEE Antennas & Propagation Society (AP-S), an HAC/SIGHT Projects call for proposals on pressing community needs, and an exciting new chapter with the IEEE Foundation through a grant from a bequest received from the Estate of Jon C. Taenzer. These programs are examples of how HAC empowers members now, and will empower them in the future, to leverage their skills to conduct technology-centric humanitarian projects in the sustainable development space. To complement the financial support, HAC offers educational resources and assessment tools to measure near-term and long-term impact, while providing comprehensive oversight of all funded projects to minimize overall risk and maximize global impact and member engagement. Over the years HAC/SIGHT have continually improved a project management process, which along with a historical context and approach, is available in this report.

In 2022, HAC has another great committee building upon the work of past leaders to grow the portfolio of impactful programs aimed at strengthening IEEE's position as a leader in the sustainable development space. To a chieve this goal, HAC continues to engage with programs across IEEE in Technical Activities, IEEE Regions, Member & Geographic Activities, Educational Activities, and Standards. One result of the collaboration efforts is how <u>IEEE Societies continue to invest in HAC programs</u>, and HAC in return delivers value for the Society as a whole and its individual members.

I'm honored to continue as the IEEE HAC Chair and for the opportunity to continue serving IEEE Members. I invite you to stay tuned throughout the year for future updates on how HAC is building a humanitarian technology ecosystem, both within and beyond IEEE, to benefit IEEE members interested in volunteering at the intersection of technology and sustainable development.

Stay safe and healthy, Sampathkumar Veeraraghavan, 2021 - 2022 HAC Chair





Sampathkumar Veeraraghavan, Chair



Kartik Kulkarni, Immediate Past Chair



Simay Akar



Mei Lin Fung



Lwanga Herbert



Jayakrishnan MC



Karen Panetta



Pritpal Singh



Lucia Pia Torres



Rabab Kreidieh Ward



Ajay Poddar, *Corresponding Member





IEEE HAC Mission, Strategic Areas of Focus, & Unique Value



What is IEEE HAC?

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.





IEEE HAC Strategic Areas of Focus



Raising Awareness

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



Providing Training

HAC provides educational resources and opportunities so that humanitarian technology participants can have a greater positive impact.



Supporting Humanitarian Technology and Sustainable Development Activities

HAC awards funding for grassroots IEEE member projects that utilize technology to address local challenges.



Building a Sustainable Development Community

HAC collaborates across and beyond IEEE to foster opportunities in sustainable development.

hac.ieee.org

Unique Value Proposition of HAC Provides Solutions to Challenges



What does IEEE HAC offer IEEE members and organizational units (OUs)?

- 1. Organizational Vitality: HAC offerings can help engage existing and potential members, including the aspect of succession planning for IEEE OUs by nurturing the IEEE leaders of the future.
- 2. Learning Opportunities: HAC/SIGHT training and educational content enrich the member experience by providing life-long learning opportunities for academic and professional development.
- **3.** Community: HAC/SIGHT can facilitate connection with like-minded IEEE members around the world; a global, grassroots network of technologists contributing to sustainable development.
- 4. Access to Ecosystem: HAC plays a role in inspiring members to continue in the larger IEEE ecosystem. As IEEE is a large, multifaceted organization, there are many opportunities to create relationships and bi-directional pipelines between programs, funding opportunities, projects, and more. HAC/SIGHT activities, especially projects, can serve as a next step, entry point, or steppingstone to other opportunities within IEEE.
- 5. Increased Impact: HAC's experience and expertise in managing grassroots member projects, collecting impact data, and innovating program development can aid IEEE members and OUs increase the impact of their humanitarian technology activities, effectively contributing to the overall IEEE mission.





Humanitarian Activities

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

Training and	Professional	Greater
Awareness	Development	Purpose
Project Funding	Connection to a Global Network (IEEE SIGHT)	Sustainable Development Community





IEEE HAC First Quarter 2022 Highlights





Collaboration

HAC collaborates across and beyond IEEE to increase sustainable development innovation



IEEE HAC First Quarter Report 2022



Committee

IEEE HAC Collaboration Efforts in First Quarter 2022





IEEE HAC & IEEE MGA Entity Collaborations

HAC is engaging with all IEEE Regions and several additional Member & Geographic Activities (MGA) entities to strategically nurture grassroots humanitarian technology and sustainable development volunteer efforts in their respective areas.

- In Q1 2022, HAC has been exploring collaboration opportunities with IEEE Regions 1, 4, 5 & 8 through discussions with Region leadership, and will continue to invest in collaborating with the leadership of all Regions throughout the year.
 - HAC will present at the IEEE Region 4 meeting.
 - An HAC Regional Coordinator presented on HAC opportunities and benefits at the IEEE Region 5 meeting.
 - HAC will present at the IEEE Region 8 Students and Young Professional Congress (SYP 2022) and the Region 8 SIGHT Congress.





Committee

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-inclass technology to address sustainable development challenges.

- The IEEE Antennas and Propagation Society (AP-S) contributed US\$25,000 to the IEEE SIGHT Fund of the Foundation in 2021 to collaborate with HAC by conducting a <u>special</u> <u>Call for Proposals</u>. The call solicited proposals from AP-S Chapters that utilize AP-Srelevant technology to address local community challenges.
 - Submissions were accepted from 15 November 2021 28 February 2022
 - Fourteen proposals were received from applicants in five different countries
 - Reviewers are carefully evaluating proposals to offer awards of up to US\$3,000 to support those that demonstrate an understanding of the real needs of a local community and a plan to complete a project utilizing AP-S-relevant technology to address those local community challenges.
- HAC presented at a Signal Processing Society (SPS) Chapter chair meeting in March on the breadth and width of HAC programs, providing examples of how SPS chapters can use HAC as a mechanism to engage their members, especially young people. HAC is looking forward to fostering the relationship with SPS this year.







IEEE HAC & IEEE Entity Collaborations

- HAC/SIGHT supported the first-ever <u>IEEE Education Week</u> by submitting educational material to the online repository and promoting content via monthly newsletters and social media platforms.
- HAC/SIGHT have formally coordinated with another program <u>the Pre-University STEM Portal Grants and TryEngineering</u> in the call for project proposals to ensure that IEEE members are aware of and utilize their offerings. This is one small way in which HAC facilitates members with knowledge about and access to the larger IEEE ecosystem.
- HAC participated in the <u>IEEE Eta-Kappa-Nu (HKN) Pathways to Industry</u> event with a virtual booth and video to outline how IEEE-HKN members can participate in HAC activities at a grassroots level to address needs in their local communities.
- This year's IEEE SIGHT Day celebration will include featured sessions with IEEE Women in Engineering, the Pre-University STEM program, and IEEE Young Professionals.
- HAC is exploring opportunities for collaboration with IEEE Standards.









IEEE HAC & the IEEE Foundation

- The IEEE Foundation Board has approved IEEE HAC to receive US\$175K from a bequest from the Estate of Jon C. Taenzer. HAC will use this to establish a new small grants program that will take course over the next three years.
 - The program will focus on breakthroughs in aids for persons with disabilities or supporting engineers in under-developed countries.
 - The program is currently in its discovery phase, and a call for proposals is planned for later this year.

IEEE Foundation

Achieving Shared Goals Through Collaboration

Working groups with representatives from IEEE HAC and IEEE Societies, Regions, IEEE programs and organizational units (OUs), and external organizations continue to define plans for collaborative engagement. These collaboration 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>.



Projects



Humanitarian Activities Committee

HAC fosters opportunities for hands-on, career-relevant experience through projects











IEEE HAC/SIGHT Call for Proposals Focused on Pressing Community Needs

- Call to support to IEEE member grassroots projects that utilize technology to address pressing needs of the members' local communities
- Powerful opportunity for IEEE members to utilize technical expertise in their local communities to help IEEE achieve its mission
- Awards of between US\$1,000 and US\$5,000 per project.
- Term of funding: Up to 6 months
- For the first time, HAC/SIGHT will collect data on project leader gender
- Updates made to project monitoring process and incorporation of new platform to capture aggregate data and institutional knowledge to inform strategic decision making





IEEE HAC/SIGHT Projects Context & Approach

Historical Context

- Since 2013, IEEE HAC and SIGHT have provided funding to IEEE Members who implement humanitarian technology and sustainable development projects in their local communities.
- Funded projects address one or more of the UN Sustainable Development Goals (SDGs).
- From 2016 2021, HAC awarded over US\$2.9M to 421 projects and events.
- In 2021, HAC received a record-breaking 385 project proposals from 45 countries and 7 IEEE Regions; 92 projects were awarded funding.

Approach

Funded projects must:

- Have a technology component; projects cannot be solely humanitarian in nature
- Focus on application/localization of technology vs. the research and design of brand-new technology
- Address medium- to longer-term challenges not immediate needs in a disaster
- Be locally-driven
- Be grassroots/bottom-up
- Have a connection to an existing IEEE organizational unit to act as the fiscal agent; HAC/SIGHT Projects funding may only be transferred within the IEEE ecosystem
- Submit regular reporting updates, which are reviewed by the HAC Project Monitoring Committee

Solutions have included sustainable power sources, clean water systems, telemedicine platforms, internet access, and many more.





HAC/SIGHT Project Management Process

A systematic process to reduce risk and increase impact

Project proposals are evaluated by HAC/SIGHT reviewers to ensure they are within the scope of HAC/SIGHT funding, meet eligibility requirements, and are a strong candidate for further consideration.

Stage 1 Evaluation

Stage 2 Evaluation

Project proposals are scrutinized by the HAC/SIGHT Projects Committee to ensure the applicant team provided all necessary information and the project has a reasonable chance of success. The HAC/SIGHT Projects Committee evaluate proposals based on strict criteria to select the most qualified to be awarded funding.

Decision

ORIMS & Legal Review

All selected proposals are sent to the IEEE Office of Risk and Insurance Management (ORIMS), and IEEE Legal if necessary, to determine risks associated with the project that have not been identified yet.*

*If a potential risk is identified, this is discussed with the committee and applicant, and a decision is made about funding the project.

Once approved, projects are under the purview of the HAC Project Monitoring Committee, volunteers who offer guidance and support until its conclusion Funding

All funding goes through and is overseen by an **IEEE fiscal** intermediary usually the local Section - in accordance with the IEEE FOM. Funding is never made to an external entity. Any funding not used according to the approved budget is returned to HAC.

ØIEEE

IEEE SIGHT

Special Interest Group on Humanitarian Technology

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





Humanitarian Activities Committee





IEEE SIGHT – Growing Membership & 2021 SIGHT Group of the Year





2021 IEEE SIGHT Group of the Year IEEE CEC (Chengannur College of Engineering) SIGHT Group

- IEEE SIGHT Mission A global network of IEEE volunteers partnering with underserved communities & local organizations to leverage technology for sustainable development
- IEEE SIGHT continues to set new records for the program with over 28,000 individual members in 130 countries and all 10 IEEE Regions as of 31 March 2022.
- SIGHT currently has 207 SIGHT Groups that have been established in 54 countries. IEEE Sections and Student Branches that are interested in forming SIGHT Groups are encouraged to <u>submit a petition</u> to the IEEE SIGHT Operations Subcommittee.
- The IEEE CEC (IEEE College of Engineering Chengannur Student Branch) SIGHT Group has been chosen as the recipient of the 2021 IEEE SIGHT Group of the Year Award! The Group was selected to receive this award for its commitment to impacting its local underserved community through the development or deployment of technology. An honorable mention for the Award has been given to the IEEE NJ-Coast Section SIGHT Group for their meaningful contributions to SIGHT in 2021. More information about the amazing work of both Groups can be found on the <u>SIGHT blog</u>.





IEEE SIGHT Day – 28 April 2022

- IEEE SIGHT Day is held 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.
- Activities planned from 25 April 29 April
 - Opening Session with IEEE President Ray Liu, HAC Chair & SIGHT Chair
 - Three SIGHT Group Socials for IEEE SIGHT Group leaders and members
 - 2021 SIGHT Awards presentation ceremony
 - Collaboration with other IEEE programs that have resources that could benefit SIGHT members and Groups
 - IEEE Young Professionals IEEE volunteering platform
 - IEEE Women in Engineering Volunteering experiences with IEEE HAC/SIGHT & WIE highlighting the 25th anniversary.
 - TryEngineering and the Pre-University STEM portal & grants
 - Chat with the HAC & SIGHT Chairs
 - SIGHT trivia challenge
 - Share your SIGHT Story
- SIGHT Groups are encouraged to plan and host their own activities to celebrate SIGHT Day.



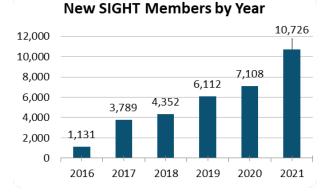
IEEE S

IEEE SIGHT Day 28 April 2022

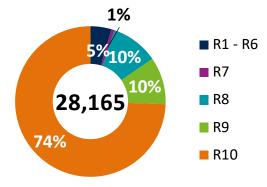
Celebrating a Global Network of Volunteers

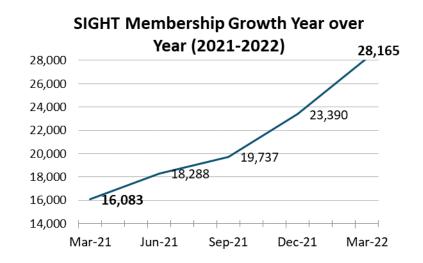


SIGHT Membership – Indicators of Engagement and Growth



Active SIGHT Members by Region





IFFF SIGHT

Special Interest Group on Humanitarian Technology

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Public Visibility, Upcoming Events, & Opportunities



HAC/SIGHT Public Visibility

- HAC started the year on a high note with the 2021 IEEE HAC Annual Report and the HAC/SIGHT Success Story Portfolio, publications that demonstrate the record-breaking growth and portfolio of programs offered in 2021. HAC plans to produce both documents again in 2022.
- IEEE Institute published an article on HAC's work in 2021 "<u>IEEE Humanitarian Program</u> <u>Sees Record Growth</u>." The article provides visibility on the impactful work of HAC in 2021 despite the continuing challenges of the pandemic.
- HAC delivered the general session "Increasing Value Delivered to Members and OUs through IEEE HAC/SIGHT" at the IEEE Board of Directors February meeting series.









Committee

Upcoming HAC/SIGHT Events

- 28 April IEEE SIGHT Day
- 25 29 April <u>IEEE SIGHT Day celebration activities</u>
- May/June HAC/SIGHT Projects funding decisions made regarding submissions to the first call for proposals
- **November** second IEEE HAC Global Summit

More events to come!

Opportunities with HAC/SIGHT

MEMBERS

- Add free SIGHT membership to your IEEE membership
- Take part in the free, online courses on the IEEE Learning Network (ILN) that equip participants with a basic understanding of humanitarian technology and sustainable development topics
- Form a SIGHT Group and establish a team to assess needs in your local community, apply for financial resources, and implement a sustainable technological solution
- Donate to the IEEE SIGHT Fund of the IEEE Foundation; your contribution of any amount helps HAC/SIGHT transform the lives of individuals and communities around the world
- Read and share this report and the other 2021 HAC Reports

OUs

- Identify opportunities for collaboration and joint programs
- **Publicize** HAC/SIGHT opportunities and events
- Sponsor or Present at the 2022 IEEE HAC Global Summit





IEEE SIGHT

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Write to us with your ideas at

hac-office@ieee.org





Thank You



