IEEE Humanitarian Technologies

A Year of Momentum

2025 Annual Report

IEEE
Humanitarian
Technologies

Table of Contents

Letter from the Chair

Dear Colleagues, Volunteers, Partners, and Friends,

One thing has become increasingly clear to me in this role: the extraordinary work of IEEE Humanitarian Technologies is not yet known as widely as it deserves to be. Not in aggregate — not just the numbers, as meaningful as they are—but in the granular, human, sometimes-unglamorous reality of technology meeting a need in a specific place, with specific people, at a specific moment.

I raise it not as a criticism but as a belief: the communities we serve, and the thousands of volunteers, engineers, and partners who show up for them, deserve to have their story told with the same rigor we bring to the work itself.

That conviction shapes everything you'll find in this report.

A YEAR OF MEASURABLE PROGRESS

Because of you—our volunteers, partners, supporters, and program leaders—2025 was a year of real momentum. Across 52 countries and all 10 IEEE regions, 4,688 volunteers contributed more than 177,000 hours. One hundred and fifty-three projects were implemented. Nearly 400,000 individuals were impacted. And US$1.85 million was awarded to advance locally led solutions. We also launched what may be our most ambitious initiative yet: the GenAI for Good Challenge, in partnership with the International Telecommunication Union, which drew 318 teams from 79 countries, with nine finalists now advancing to prototyping in 2026.

THE WORK BEHIND THE WORK

What I've come to appreciate more deeply in this role is how much of what we do happens before anything is deployed. The work of getting the conditions right—making sure the technical solution, the local context, and the infrastructure for long-term use are all genuinely aligned—is less visible than a launch announcement. Still, it's where the difference between a successful project and a stalled one is usually made.

That is the connective tissue of IEEE Humanitarian Technologies. We are not simply a funding body or a network of good intentions. We are the organization that asks the harder questions early, that sits with engineers and communities and implementation partners together, and that treats deployment not as a finish line but as a beginning.

The programs in this report reflect that discipline. So does the role we play across the Consortium programs, connecting humanitarian initiatives that were built independently, helping them share what they've learned, and making sure the field gets stronger each time.

STILL BUILDING—AND THAT'S AS IT SHOULD BE

I'll be direct: there is real work still ahead. We are continuing to grow our reach, deepen our partnerships, and tell the story of our impact more clearly and more often. The people we serve deserve for the world to know what is being accomplished in their midst. And the engineers, donors,

and volunteers who make this work possible deserve to see the difference they are making—not in the abstract, but in the specific.

When I travel and speak on behalf of this organization, I hear the same hunger again and again: people want to be connected to work that is real. Work with a face and a place. Work that actually changed something. That is a challenge I take personally, and one this report is our sincere effort to answer.

LOOKING FORWARD—TOGETHER.

As we move into 2026, the work across every program moves forward, not in new directions, but deeper into the ones we've committed to.

GenAI for Good finalists advance to prototyping, with three in-country implementations on the horizon. IEEE MOVE expands into new locations, taking what we've learned from disaster relief deployments in the U.S. and Puerto Rico, and the India launch, to build toward a truly global footprint. Tech4Good grows its Challenges model into new geographies. SIGHT continues strengthening its Groups and the local partnerships that make them work. Smart Village deepens its investments in the enterprises already underway. EPICS expands its record-setting cohort of student-led projects. REACH now serves more educators and classrooms. Empower a Billion Lives helps winning teams continue operating with prize funding.

And across all of it, we are aligning impact metrics consortium-wide—so that what we learn in one program strengthens every other.

The aspiration of IEEE Humanitarian Technologies has always been larger than our current footprint, and I believe that is exactly as it should be. Aspiration, when it is honest and grounded, is not a gap. It is a compass.

To our volunteers, partners, program leaders, and supporters: thank you. The conviction I started with—that the work of IEEE Humanitarian Technologies deserves to be known beyond our immediate circles—gets a little easier to act on every time I see what you accomplish. What we do is real. It reaches people. And because of you, it always will.

With deep gratitude and great optimism,

Grayson Randall
Chair, IEEE Humanitarian Technologies Board (2025, 2026)

Global Reach & Impact

PEOPLE IMPACTED:

385,119
individuals impacted

PROJECTS:

153
projects funded

40
countries

10
IEEE Regions

VOLUNTEERS:

4,688
volunteers contributed

188,493 hours

PROJECT IMPLEMENTATION FUNDING AWARDED:

US $1.85M+
awarded across programs

TRAININGS:

21,002
trainings completed

HT Program Highlights

GenAI for Good Challenge

From Prototype to Country Level Impact

In collaboration with the International Telecommunication Union (ITU), IEEE HT launched GenAI for Good — a global competition leveraging generative AI to address critical challenges in health, agriculture, and climate resilience.

Introduced at AI for Good in Geneva before an audience of more than 10,000 global leaders and practitioners, the Challenge mobilized IEEE's technical expertise and global network in service of the UN Sustainable Development Goals.

APPLICATIONS DREW

318
TEAMS representing
79
COUNTRIES

Nine finalist teams will advance to prototyping in early 2026, with three winners selected for in-country implementation. The GenAI for Good Challenge will leverage an open-source framework developed by ITU and has the potential for significant and sustainable impact. Following the execution of this Challenge, IEEE HT will assess the potential to expand this work.

THREE SDG-ALIGNED FOCUS AREAS GUIDE THE COMPETITION:

Health (The Gambia):

Non-Communicable Diseases Prevention Chatbot

Agriculture (Lesotho):

Agriculture Extension Chatbot

Climate (Bangladesh):

Extreme Weather Advisor

Real-world implementation means farmers can actually benefit from timely insights that support better decisions in the field. It transforms AI from an abstract concept into a practical tool that improves livelihoods. That shift, from prototype to lived experience, is where innovation truly matters.

– Team Agriconnect

IEEE MOVE Global

MOVE DISASTER RELIEF & OUTREACH
AN IEEE GLOBAL PROGRAM

Disaster Relief When Needed. STEM Opportunities Year-Round.

IEEE MOVE goes into action for the moment when infrastructure fails: three disaster deployments in the U.S. this year, and the launch of our first international vehicle in Bengaluru, India, designed to function when normal systems cannot.

PROGRAM HIGHLIGHTS

3
DISASTER DEPLOYMENTS
(USA)

62
STEM EDUCATION
and outreach events

1st
VEHICLE LAUNCHED OUTSIDE OF THE USA
(India)

STARLINK
CAPABILITY added

MOVE plans to continue expanding into new areas of the world in 2026.

STRENGTHENED OPERATIONS

- Red Cross partnership renewal
- Standardized deployment protocols
- Financial transparency improvements

MOVE Vehicle Launch in India

In July 2025, IEEE MOVE launched its first international Mobile Outreach Vehicle in Bengaluru, India — a significant milestone in IEEE's expanding disaster relief and STEM outreach efforts.

Designed for dual-purpose deployment, the vehicle provides emergency communications and hybrid solar power during disasters and serves as a mobile STEM education platform when not deployed.

EVENT HIGHLIGHTS

18
MEDIA REPRESENTATIVES

37
PUBLISHED ARTICLES

38.8M
IMPRESSIONS

37K+
IEEE.ORG LANDING PAGE VISITS

When not deployed for emergency response, the MOVE India vehicle becomes a "classroom on wheels." It travels to schools and IEEE conferences across Karnataka, where students learn about climate change, sustainability, and disaster preparedness through interactive STEM kits and demonstrations.

The launch of the MOVE vehicle in Bengaluru, India, by the IEEE India Council marks a significant expansion of IEEE's emergency relief footprint. The mission of MOVE India is to ensure that when disaster strikes, technology is the first thing to arrive. Our aim is to bridge the gap between crisis and connectivity. MOVE is not just providing relief—it is building a resilient next generation that understands how to use technology for the benefit of humanity.

–Sadhana Attavar, Chair, IEEE MOVE India

IEEE Tech4Good

Locally Led Innovation. Sustainable Impact.

IEEE Tech4Good offers funding so teams of IEEE members around the world can implement projects that apply technical know-how to local challenges.

Projects are valuable opportunities to leverage the IEEE network and expertise to solve global challenges and foster technology for social impact.

PROGRAM HIGHLIGHTS

500
PROPOSALS from
32
COUNTRIES

15
COUNTRIES
implementing solutions
71
PROJECTS FUNDED

US $588K+
AWARDED

NOTABLE 2025 COLLABORATIONS

- *Communication for All* with the IEEE Communications Society: **7 projects funded**
- Call for Proposals with the IEEE Electron Devices Society: **7 projects funded**
- *Community Support Program* with IEEE Region 8: **6 projects funded**
- *Andean Council Challenge* with IEEE Region 9: **3 projects funded**

This model blends humanitarian expertise with deep technical specialization. The program continues to evolve toward capacity-building and collaborative funding models.

Tech4Good Challenges Expansion

Building on a successful pilot in 2024, the Tech4Good program expanded through its Challenge modality to Lebanon, Tunisia, and the Andean Council.

This model integrates locally-focused training, mentorship, and competitive funding to strengthen humanitarian engineering capacity.

ACROSS ALL MODALITIES

161
CHALLENGE PARTICIPANTS

84%
of finalists reported
STRONG MENTORSHIP VALUE

75%
REPORTED INCREASED INTEREST
in community-based engineering

Participants reported increased engagement, and deeper commitment to community-centered design — reinforcing the program's educational and social value.

HEAR FROM RECENT PARTICIPANTS

In the workshop my team attended, we were told about the considerations we needed to take into account when evaluating the prototype's adaptability to different conditions.This helped us a lot in the process of adapting the equipment to the terrain conditions and predicting the behavior of some components, including the prototype itself, under the general conditions of the territory.

The workshop taught us to move away from an exclusively technical approach and understand the value of a sensitive, empathetic, and collaborative approach with the community.

IEEE SIGHT

Where Local Knowledge Becomes Real Impact

IEEE SIGHT
SPECIAL INTEREST GROUP ON HUMANITARIAN TECHNOLOGY

IEEE SIGHT embeds engineers directly inside local communities—so that the people designing solutions are the same people who understand what those communities actually need.

PROGRAM HIGHLIGHTS

303
SIGHT GROUPS
in
58
COUNTRIES

82K+
MEMBERS

+22%
GROWTH

1,918
EVENTS

93,289
EVENT ATTENDEES

COMMUNITY MOMENT

IEEE SIGHT Day united the 82K global network in celebrating local impact and volunteer leadership.

Consortium Program Highlights

IEEE HT supports a broader Humanitarian Technologies Consortium.

IEEE Empower a Billion Lives (EBL)

From 675 Teams to Global Breakthroughs

Empower a Billion Lives takes a competition model and pushes it further than most—past the pitch, past the prototype, into field testing - 675 teams have registered since inception. Thirty-eight teams put their solutions to work in real conditions in 2025, providing 155,000 beneficiaries with a productive level of energy access. There were $535,000 total prizes for all EBL Track and Student teams, including a Grand Prize awarded at the Global Final in South Africa to Team Emergi from Liberia, whose work is redefining urban mobility in West Africa.

38
TEAMS field-tested solutions

$150K
GRAND PRIZE awarded

GLOBAL FINAL
HOSTED IN SOUTH AFRICA in 2025

2025 EBL HIGHLIGHTS

The IEEE Empower a Billion Lives competition is a global initiative that challenges researchers, entrepreneurs, and students to develop sustainable, scalable technical and business solutions to address global energy poverty and improve quality of life for the world's most vulnerable populations, regardless of energy sources, technologies, or business models. Solutions are evaluated on their technical innovation, impact, and business viability to scale to one billion customers. Developed in 2016, the competition aims to foster innovation to develop regionally relevant, holistic solutions that leverage 21st-century technologies with exponentially declining prices. EBL's reputation and rigorous qualification process continue to help EBL-winning teams attract millions of dollars from agencies, companies, and venture capital firms and receive governmental technical and financial support.

IEEE Smart Village

Building Energy Ecosystems That Communities Own and Grow

IEEE smart village
Power a Village, Empower Communit

IEEE Smart Village takes the long view on energy access and economic viability, investing not just in technology but in the enterprises and local ownership structures that keep it running—US$600,000 committed to 12 enterprises through Smart Village this year alone, with more than two million lives reached since its founding.

2M+
LIVES IMPACTED across
4
CONTINENTS

$6.1M
INVESTED since founding

13.5K
VOLUNTEER HOURS

$600K
COMMITTED to
12
ENTERPRISES in 2025

2025 SMART VILLAGE HIGHLIGHTS

Throughout 2025, ISV actively participated in major global events. It contributed to IEEE conferences, hosted the IEEE Smart Village China Symposium in Beijing, and held its annual ISV@PowerAfrica 2025 gathering in Cairo, Egypt. This flagship event brought together more than 60 entrepreneurs, developers, leaders, and committee members to exchange insights, share lessons learned, explore new avenues for growth, and strengthen global networks.

IEEE REACH

Giving Educators the Tools to Teach Technology in Context

IEEE REACH meets educators where they are, giving teachers the tools to bring technology's social dimensions into the classroom across 136 countries.

9,900
USERS

82,620
STUDENTS IMPACTED
in 2025

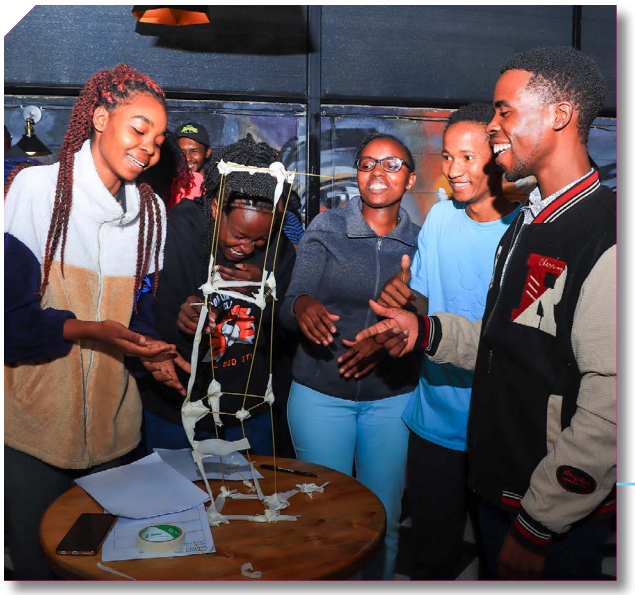
409,093
CUMULATIVE STUDENTS
since 2022

The REACH website offers a one-stop shop of resources that bring the history of technology and engineering to life in the classroom. In 2025, over 1,000 full Inquiry Units, or Lesson Plans, were accessed from the website.

2025 REACH HIGHLIGHTS

Gretchyn Bedard, a North Carolina high school history teacher, implemented the IEEE REACH resources in her classroom, and found that her "...students found the implementation... to be of value to their education." She gathered from her students that "...they had a better understanding of the chronological progression of ...technology and how it relates to societies."

An IEEE REACH training session was held in Kenya. An attendee shared that the IEEE REACH resources "...can be used as a tool to ignite curiosity, debate, and critical thinking. The future of education thrives when we combine inquiry, context, and community."



EPICS in IEEE

EPICS IN IEEE™
Engineering Projects In Community Service

From Community Listening to Student-Led Solutions

EPICS in IEEE awards grants ranging from $1,000 to $10,000 to support university teams in designing, developing, and deploying sustainable engineering solutions in partnership with community organizations. In 2025, nearly 1,000 students and over 400 IEEE volunteers from 17 countries participated, advancing IEEE's mission with impactful projects across Environment, Access and Abilities, Education and Outreach, and Human Services. After its 15th Anniversary, EPICS in IEEE continues to foster community-driven innovation through funding, mentorship, and increased global visibility.

431
PROPOSALS RECEIVED

48
PROJECTS FUNDED
(record year)

990
STUDENTS ENGAGED

$290K
DISTRIBUTED

2025 EPICS IN IEEE HIGHLIGHTS

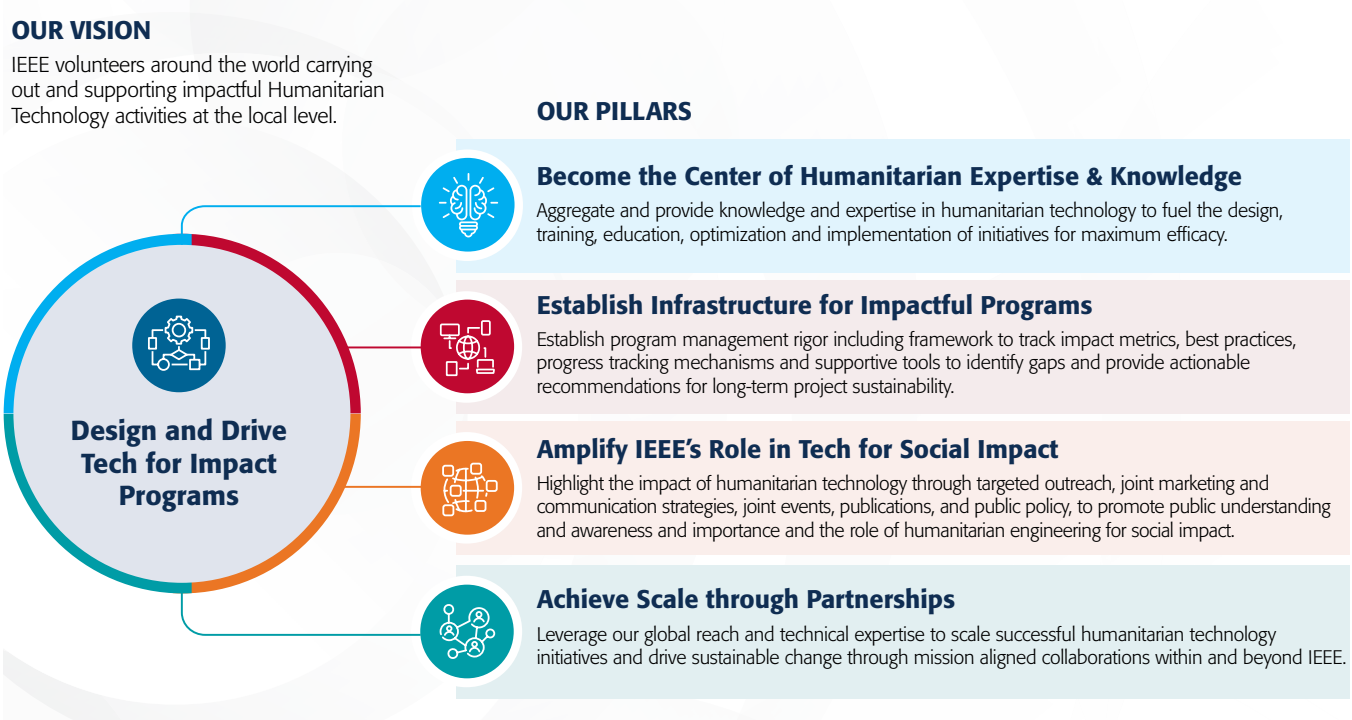
In 2025, the program received its largest donation pledge through the IEEE Foundation EPICS in IEEE Dr. Swarn S. Kalsi Community of Projects Fund. Additionally, the EPICS in IEEE Committee worked diligently this year, reviewing the highest number of proposals the program has ever received. The committee also created a "Year Two" application for projects seeking to continue for another year and developed a recognition program to spotlight Excellent EPICS in IEEE Contributors.

Strategic Development

Five-Year Strategic Plan

HT developed a 2025-2030 Strategic Plan aligned with IEEE's 2025-2030 Strategic Plan, with each HT Strategic Plan pillar aligning to one or more specific IEEE Strategic Plan goals.

The pillars of the HT 2025 - 2030 Strategic Plan are:



IEEE HT has continued to make progress against each of the pillars of the HT Strategic Plan.

Pillar: Become the Center of Humanitarian Expertise and Knowledge

IEEE HT modernized its online, self-paced educational content hosted on the IEEE Learning Network. This curriculum provides participants with an understanding of how technology can drive sustainable, community-centered impact. The program emphasizes systems thinking, meaningful community engagement, and the use of appropriate, context-driven technologies. The updated modules include multimedia enhancements and interactive assessments to strengthen learning outcomes:

- Introduction to Technology for Impact
- Foundations of Humanitarian Technology
- Community Engagement
- Monitoring & Evaluation
- Bringing it All Together

Learning about these topics will provide participants with a strong foundation to understanding the humanitarian technology and technology for impact sector and prepare them to conduct a related activity or project. Those who complete the modules earn professional development credits for each one. Further work on the visuals and presentation of course material will continue in 2026.

Pillar: Establish Infrastructure for Impactful Programs

IEEE HT continued implementing a standardized impact measurement framework across programs. The common metric framework (developed in 2023 and honed in 2024) was used to collect information from each of the seven programs in the IEEE HT consortium.

CORE CATEGORIES

- Technology & Global Impact
- Projects implemented
- Countries active
- Funding awarded
- SDGs addressed
- Training & Outreach
- Events hosted
- Trainings completed
- Resource downloads
- Volunteers Engaged
- Hours contributed
- Regions represented

Data remains self-reported but is increasingly standardized to strengthen comparability and transparency.

Pillar: Amplify IEEE's Role in Tech for Social Impact

IEEE HT strengthened IEEE's global visibility in humanitarian technology through:

- Launch of the new Humanitarian Technologies website
- Release of the redesigned Annual Report
- A global marketing campaign supporting GenAI for Good Challenge

These initiatives position IEEE as a trusted voice and convener at the intersection of technology, ethics, and global development.

Pillar: Achieve Scale through Partnerships

The GenAI for Good Challenge demonstrated what scale through partnership looks like in practice. Co-designed with the International Telecommunications Union (ITU) and in collaboration with other UN agencies it mobilized 318 teams representing 79 countries around generative AI solutions for health, agriculture, and climate resilience. It is the largest initiative IEEE HT has undertaken with international partners, and it sets a new standard for what collaborative humanitarian technology programs can achieve.

IEEE HT also expanded existing partnerships with the IEEE Communications Society and IEEE Region 8 and launched new partnerships with the IEEE Electron Devices Society and the Andean Council in IEEE Region 9.

Looking Ahead to 2026

IEEE HT remains committed to ethical innovation, global volunteer engagement, and measurable humanitarian impact.

Across programs, partnerships, and regions, 2025 reflected a year of progress and strategic momentum. From AI-driven innovation to disaster response expansion, from strengthened educational resources to deeper Society collaboration, IEEE HT advanced IEEE's humanitarian mission with clarity and conviction.

HT is excited for what the future holds and recognizes that the work accomplished in 2024 and 2025 will serve as an invaluable foundation for the efforts in the coming years. Looking ahead to 2026, IEEE Humanitarian Technologies remains committed to empowering volunteers, strengthening partnerships, and ensuring that technology continues to serve humanity — ethically, inclusively, and at scale. Plans include:

- Continuing the execution of the Five-Year Strategic Plan
- Supporting existing programs and developing new programs that enable volunteer engagement across humanitarian technology activities at IEEE and align with best practices in the humanitarian technology sector
- GenAI for Good finalist prototyping. Winner selection & in-country implementation
- Continuing the global expansion of programs such as IEEE MOVE
- Exploring internal and external partnerships to enhance collaborations aligned to the HTB goals and objectives
- Improving the processes and continuing to the automation of the HT program's data collection to increase quality and quantity and better demonstrate how IEEE is achieving social and environmental impact
- Deeper metric alignment across consortium programs - Iterating frameworks to track progress and measure impact of all the consortium programs across IEEE
- Implementing a comprehensive marketing and communications strategy
- Mapping opportunities of IEEE's humanitarian technology programs to support and enable the ecosystem to grow and become more cohesive

With the continuation of existing efforts from volunteer leaders and HT members together with support from its staff team, HT is well-poised to guide and support humanitarian technology activities across IEEE, provide meaningful insight into effective best practices, and leverage the strength and reach of the IEEE network to apply technology for social impact. HT plans to keep serving as the hub for the younger generation of volunteers who want to leverage technology for the benefit of their local communities to solve the most pressing challenges of today's world.

People

Board and Staff Members

BOARD

GRAYSON RANDALL
Chair

LWANGA HERBERT
Immediate Past Chair
Chair, HTB Nominations & Appointments Committee
Chair, Partnership Ad-hoc Committee

SIMAY AKAR KOEHLER
Member & Geographic Activities Representative & Chair, Finance Committee

SADHANA ATTAVAR
Appointed representative to MOVE Global Committee

LODERAY BRACERO MARRERO
(January - July)
Appointed representative to MOVE Global Committee
Chair, MOVE Global Committee

MOHAMED ESSAAIDI
Chair, SIGHT Committee

ROBERT FISH
Member

STEPHANIE GILLESPIE
Educational Activities Representative & Chair, Education Committee

MATTHEW IMHOFF
Chair, Tech4Good Committee

MORGAN KIANI
(July - December)
Appointed representative to MOVE Global Committee

KALYANI MATEY
Young Professionals Representative

VIKASS MONEBHURRUN
Standards Association Representative

VICKIE OZBURN
Chair, Best Practices Committee

PRITPAL SINGH
Chair, Events Committee

LUCIA PIA TORRES
Chair, Project Monitoring Subcommittee

ADIL USMAN
Technical Activities Representative & Chair, Outreach Committee

FELIX VEGA
Technical Activities Representative & Chair, Programs Committee

EMI YANO
Member & Geographic Activities Representative

PROFESSIONAL STAFF

DONNA HOURICAN
Staff Executive, Corporate Activities

MARIELA MACHADO FANTACCHIOTTI
Senior Director, Humanitarian Technologies

ANANDA GRANT
Director, Humanitarian Technologies & Impact

JULIANNA PICHARDO
Manager, Humanitarian Activities & Sustainable Development

BECKY BORESEN
MOVE Program Manager, Humanitarian Technologies

BRITTANY CHUBBUCK
Project Specialist, Humanitarian Technologies

BETSY TOLAND
Finance & Operations Administrator

ANTONIA NICHOLS
(March - December)
Program Manager

Opportunities to get involved

The consortium of IEEE HT programs leverages the strength and reach of the IEEE network to make a difference in local communities around the globe. There are many ways to get involved, including:

- **VOLUNTEERING** time and skills to ongoing initiatives
- **APPLYING** for funding to deploy an innovative technology solution that solves a local challenge
- **DONATING** money to the IEEE Foundation to support HT Consortium Programs
- **SPREADING** the word about IEEE HT and encouraging others to get involved

Visit the IEEE HT website for a portfolio of ongoing opportunities for related grants, competitions, and career development; and information on how to contribute to efforts through volunteering, partnering, and donating.

IEEE Humanitarian Technologies

Contact

htb-staff@ieee.org
ieeeht.org

ieeeht.org

IEEE Humanitarian Technologies

ieeeht.org