Celebrating Success

ILLUMINATE

EDUCATE

ENGAGE

ENERGIZE
Leadership Message

I am pleased to report and celebrate our success in achieving our US$30 million Realize the Full Potential of IEEE Campaign goal in 2020. I am even happier to report the depth of the philanthropic support the campaign garnered – from individual IEEE members, IEEE members working through their IEEE ‘organizational units,’ companies who rely on our members’ talents, and other individuals who see the educational and humanitarian value in the work our members are doing. I, and all the members of the IEEE Foundation Board of Directors, are grateful for your generosity and support, especially during this particularly challenging year.

John R. Treichler
IEEE Foundation President

We are appreciative to all the donors, supporters and volunteers who made this year and the Campaign a success. We could not have done it without you! Everyone who contributed their time, talent and treasure can take great satisfaction in knowing that the campaign has positively impacted the lives of real people around the world and will continue to do so. We invite you to peruse this Annual Report to learn more about how your philanthropic spirit during 2020 helped the IEEE Foundation improve lives. Let’s continue to realize our full potential—and make an impact—for years to come.

Karen A. Galuchie
IEEE Foundation Executive Director
Year in Review

As the world worked to find its way through the pandemic, the members of the IEEE community stepped up - as you always do. 2020 was a momentous year despite our collective global challenges. Thank you to our donors, supporters and volunteers for facing these challenges together.

We have 30 million bold new reasons to be proud of the result of The Realize the Full Potential of IEEE Campaign. Thanks to you, the Campaign exceeded its fundraising goal of US$30 million—with a total of $32.1 million raised. We proudly announced this achievement before the end of the year and are excited to have you celebrate and continue the momentum into the new year of 2021. Our sincere gratitude to you for helping us achieve this ambitious goal and make major impacts throughout IEEE.

Even with such success, the COVID-19 pandemic presented unique challenges and IEEE members, IEEE programs, the IEEE Foundation and our donors adapted to address them. To support the IEEE response, the IEEE Foundation COVID-19 Response Fund was established, and donors answered the call. Donations distributed to IEEE programs and initiatives ensured a solid base of support for IEEE strategic goals that were impacted by the pandemic.

While we were physically separated, a series of Virtual Spotlight Webinar events were launched in 2020, allowing the IEEE Foundation to connect with our constituents and engage an even wider audience. This is a positive outcome that we will continue into the future.

Thanks to you and the donations raised in cooperation with IEEE organizational units, 229 IEEE funds, 13 of which were added in 2020, benefited from your generosity to the IEEE Foundation.

What’s most impressive is the ongoing impact your generosity has on the lives of individuals and communities around the world:

• Raising awareness of the IEEE initiatives that address pressing global challenges
• Forging strong partnerships with corporations, individuals and non-profits
• Expanding resources to have a more significant impact on global challenges.

You are the driving power that makes the difference, and we look forward to continuing the momentum. In the following pages, we share program highlights and 2020 impacts. We categorize the IEEE programs supported by your philanthropy into four main pillars: **Illuminate, Educate, Engage and Energize.**
**Spirit of Philanthropic Investment**

Celebrating those who embody the philanthropic spirit.

With contributions from generous donors around the world, the IEEE Foundation invests in philanthropic programs that advance technology and education for the benefit of humanity.

Visit the IEEE Foundation website for the full 2020 Audited Financial Statements:

[ieeefoundation.org/about/financial-information](http://ieeefoundation.org/about/financial-information)

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**DONATIONS**
- $798,924
- $2,057,245
- $294,435
- $1,997,570
- $5,148,174

**PROGRAM AREA**
- Illuminate
- Educate
- Engage
- Energize
- Total

**PROGRAM FUNDING**
- $490,795
- $863,231
- $380,464
- $1,718,461
- $3,452,951

**GIVING BY CONSTITUENCY**
- Individuals: 53%
- Corporations & Foundations: 24%
- IEEE: 23%

**GIFT TYPE**
- MAJOR GIFTS: 50%
- ANNUAL GIFTS: 32%
- PLANNED GIFTS: 18%

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**Donations by Program Area**
- Illuminate: $1,065,513
- Educate: $1,298,862
- Engage: $380,353
- Energize: $1,916,918
- Total: $4,661,646

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**Total Donors:** 7,445  
**Repeat Donors:** 4,418  
**Average Gift:** $691.00  
**Loyalty Donors:** 1,097

Loyalty Donors: 10+ Years of Consecutive Giving
Ways You Give

Donor Advised Funds
Giving through Donor Advised Funds (DAFs) is an excellent way for donors to invest in programs that advance technology for the benefit of humanity. Through DAF giving, donors, like you, find ways to fit the mission of IEEE and the IEEE Foundation into their philanthropic giving strategy.

$95,130 given

Individual Retirement Accounts
Donors in the US often opt to allocate the distribution of their Individual Retirement Account (IRA) directly to IEEE and the IEEE Foundation. Donors with IRAs should be aware that the CARES Act increased the minimum age for a required minimum distribution from 70½ to 72.

$111,260 given

Tribute Giving
To recognize and celebrate individuals who have made an impact on their lives, donors choose to give tribute gifts. During a year like 2020, it was a particular honor that donors selected IEEE and IEEE Foundation as the vehicle to celebrate those who mattered most.

$32,338 given

Honorarium/Cash Prize Giving
Through awards and conference speakers, IEEE (and other professional associations) recognize individuals and groups who make contributions in advancing the fields of interest of IEEE. Some of these recipients chose to pay forward the cash prize or speaker fee associated with the recognition.

$45,796 given

Matching Gifts
As an employee benefit, many companies match gift or volunteer hours. These programs allow donors to double, or sometimes triple, the impact of their contributions. As volunteer driven organizations, IEEE and the IEEE Foundation are in a unique position for donors to make an impact by taking advantage of their current (or former) employers volunteer matching program.

$46,660 given

Bequest Giving
Donors who are Forever Generous make a legacy gift to provide resources to face our collective global challenges. Donors who leave a bequest truly engrave a legacy of generosity and advancement on their professional home at IEEE.

$814,780 given

82 donors
$95,130
Made through donor advised funds.

71 Matching Gifts
$46,660
Donors leverage their employer’s gift or volunteer match program.
In 2020, 24 new donors were added to this prestigious group and 11 were elevated to the next giving level. This year, seven corporations were added to the IEEE Heritage Circle and four were elevated to the next level. Our 2020 “Class” of Heritage Circle members gave in support of awards, scholarships and a broad range of programs that invest in advancing technology for humanity. Many gave in tribute to loved ones lost and in honor of great minds in their field that are no longer with us. The IEEE Foundation is grateful for the commitment and generosity of these loyal donors, especially in the face of one of most challenging years in modern history, and are proud to call them Honored Philanthropists.

Our Donors

IEEE Heritage Circle – Honored Philanthropists

2020 reminded us that IEEE and the IEEE Foundation are supported by individuals and organizations who meet crises not with fear, but with action. No one embodies that spirit more than members of the IEEE Heritage Circle. IEEE Heritage Circle includes donors whose gifts and pledges total US$10,000 or more since 1 January 1995. Donors are categorized within six named giving levels ranging from US$10,000 to more than US$1M.

In 2020, 24 new donors were added to this prestigious group and 11 were elevated to the next giving level. This year, seven corporations were added to the IEEE Heritage Circle and four were elevated to the next level. Our 2020 “Class” of Heritage Circle members gave in support of awards, scholarships and a broad range of programs that invest in advancing technology for humanity. Many gave in tribute to loved ones lost and in honor of great minds in their field that are no longer with us. The IEEE Foundation is grateful for the commitment and generosity of these loyal donors, especially in the face of one of most challenging years in modern history, and are proud to call them Honored Philanthropists.
IEEE Goldsmith Legacy League – Forever Generous

The IEEE Goldsmith Legacy League is an elite group of planned giving donors who are Forever Generous. The group is named for Alfred N. and Gertrude Goldsmith, whose philanthropic vision seeded the IEEE Foundation’s ability to support IEEE’s mission. Members of the IEEE Goldsmith Legacy League are building tomorrow by leaving legacy gifts to benefit future generations of technologists, scientists and engineers. Many members have included a bequest in their will or trust document. Some have named the IEEE Foundation as a beneficiary of a life insurance policy, retirement plan or charitable remainder trust.

In 2020, three additional donors lifted IEEE to the level of family by including the IEEE Foundation in their estate plans. Their names were added to the elite roster joining donors like Emerson and Elizabeth (Betsy) Pugh in investing in the IEEE programs that illuminate, educate, engage and energize human potential. The Pughs’ are esteemed members of both the IEEE Heritage Circle and the IEEE Goldsmith Legacy League. Following their establishment of ‘The Elizabeth & Emerson Pugh Young Scholar in Residence’ at the IEEE History Center in 2018, the Pugh’s generous gift in celebration of the History Center’s 40th anniversary in 2020, helped to propel the IEEE Foundation across the finish line of the Realize the Full Potential of IEEE Campaign.

IEEE Goldsmith Legacy League and IEEE Heritage Circle members

Emerson and Elizabeth (Betsy) Pugh.

• New to Listing
• Deceased
COVID-19 raised concerns over infection and transmission worldwide, it also brought out the best of volunteerism and the human spirit. This is particularly true for IEEE Smart Village’s (ISV) work to support energy-impoverished communities globally by providing renewable energy, community-based education and entrepreneurial opportunities. According to ISV leaders, its many volunteers worked tirelessly to address the current and future needs of villagers in the face of this unprecedented global pandemic. “From donating solar power systems and setting up temporary hospitals to educating the most disadvantaged on how to stay safe from the virus, our team is continuing to use their talents to serve others,” confirmed Dan Estes, 2020 Chair, IEEE Smart Village Marketing (pictured on right), who was moved by volunteers’ empathy for others and commitment to problem-solving and innovation during this crisis.

On 16 November, Ray Larsen (left) and Robin Podmore (center), the two co-founders of IEEE Smart Village, were honored at the Rotary Silicon Valley Smart Village E-Club meeting. Larsen and Podmore were delighted to be inducted into the newly formed “IEEE Smart Village Hall of Honor” for their “Outstanding Service and Technical Contributions,” as was announced that evening. It was also announced that the “IEEE Smart Village Hall of Honor Fund” was created to advance ISV Entrepreneurs through educational opportunities in recognition of Ray and Robin.

**Illuminate**

Illuminate the possibilities of technology by using it to address global challenges.

Technology allows us to ask previously unimaginable questions and find solutions to unsolved problems. IEEE programs, such as the five displayed below, engage members, volunteers and students in conceptualizing and delivering technological solutions that positively impact lives world-wide.

- **IEEE Smart Village**
- **IEEE SIGHT**
- **EPICS in IEEE**
- **MOVE Community Outreach**
- **Empower A Billion Lives**

In April 2020, the IEEE Foundation established its COVID-19 Response Fund. Since then, a total of 242 donors recognized the need to respond to the “troubles” at hand, and received US$50,665 in donations (including a dollar-for-dollar match by the Foundation) -- surpassing its goal of US$50,000. Thanks to the generosity, drive and dedication of so many, the IEEE Foundation COVID-19 Response Fund has made possible a variety of projects that support IEEE’s mission and strategic goals while helping to respond to the imminent need worldwide during these turbulent times.

149,750 Lives transformed through the delivery of innovative technological solutions in 2020.

35 Sustainable projects and deployments bringing electricity, education and hope throughout the world in 2020.
A devoted member of IEEE since 1980, Anne-Marie Sahazizian, P.Eng., Life Senior Member, enjoyed a renowned career as an electrical engineer. Though she passed in September 2019, her proud legacy lives on thanks to her family’s creation of the “Anne-Marie Sahazizian Scholarship Fund.” Established by Sahazizian’s children through their generous donation to IEEE’s Power & Energy Society (PES) Scholarship Plus Initiative, the Anne-Marie Sahazizian Scholarship Fund aims to celebrate Anne-Marie’s outstanding contributions to the field and passion for supporting the next generation by increasing the number of well-qualified, entry-level engineers in the power and energy industry. Beginning with the 2020/21 cycle, six Sahazizian Scholars will be selected with preference given to qualified female applicants. Only Scholars who have already been selected as recipients of the IEEE PES Scholarship are eligible to be considered for this recognition in Anne-Marie’s name.

Learning has never been so much fun or experiential for young patrons of the Chicago Public Library (CPL) system thanks to the availability of “ScienceConnections Discovery Packs,” a unique initiative administered by the IEEE Chicago Section and funded by S&C Electric Company, a Chicago, IL, USA-based provider of equipment and services for electric power systems. Stowed in signature backpacks, Discovery Packs are STEM focused kits featuring books and activity sets that let kids explore different topics through hands-on learning. Discovery Packs cover 15 popular, kid-friendly topics – including “Bee Bot Robotics,” “Coding Critters,” “Electrical and Circuits,” “Gravity, Forces and Motion,” “Simple Machines,” and more – are available at 80 branches of the Chicago Public Library system, for a total of more than 500 discovery packs in circulation (suspended due to COVID).

Science Kits for Public Libraries (SKPL) program is an IEEE program that raises funds for public libraries to make science kits and hands-on STEM experiences, such as the Discovery Packs, free and as easy to check out as a book.

**Educate**

Educate the next generation of innovators and engineers.

The future of technology depends upon the nourishment of brilliant minds, the creation of opportunities, and the cultivation of a generation of socially responsible technology professionals. IEEE programs designed to provide educational opportunities for pre-university students, university students and young professionals are enhanced by donor support.

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Engage

Engage a wider audience in appreciating the value and importance of engineering and technology.

Technological advancements and their impact on humanity during the past 150 years have been monumental. Preserving this history enables us to better understand today and improve tomorrow. The donor supported projects of the IEEE History Center engage anyone interested in the development of electrical and computer engineering and their role in modern society.

The IEEE History Center

With its ability to detect a person or object’s exact position anywhere on the earth at any time, the Global Positioning System (GPS) has had groundbreaking implications for a world that relies on navigation. Richard (Dick) and Nancy Gowen’s generous gift to the IEEE History Center Fund of the IEEE Foundation, enabled oral histories from three of the four original founders of GPS technology to be added to the History Center’s “GPS Collection,” on its Engineering and Technology History Wiki which now contains the oral histories from all four fathers of GPS. While the History Center had previously secured the oral history of Brad Parkinson, GPS founder and 2018 IEEE Medal of Honor recipient for his major role in its invention, the Gowens’ gift enabled the completion of oral histories from the three other principle architects of GPS. They include: James Spilker, Richard Schwartz, and Hugo Freuhauf. Parkinson, Spilker, Schwartz and Freuhauf subsequently received the prestigious £1 million “Queen Elizabeth Prize for Engineering” (QEPrize) in 2019.

On Monday morning, 18 August 1980, Dr. Robert Friedel, director of IEEE’s new Center for the History of Electrical Engineering, arrived at the IEEE headquarters in New York City. Given a desk, a typewriter and telephone, he began fulfilling the mission set by the IEEE History Committee: to preserve, research and promote the histories of electrical science and technology for 220,000 members, scholars and the public. Over forty years with IEEE’s true globalization, near doubling of membership, and the digital revolution, the Center has grown in size, scope and influence for the benefit of members, remembering and recognizing their contributions to our world. We are proud to celebrate 40 years of continuity and change of the IEEE History Center. The Center has expanded, enhanced and grown thanks to our donors and contributors. We look forward to continuing to support The Center’s mission to preserve, research and promote the history of information and electrical technologies for years to come.

IEEE Milestones dedicated in 2020 despite the pandemic.

IEEE Life members

IEEE History Center Timeline

Celebrating 40 Years

1985 1st Milestone: Landing of the Transatlantic cable, Heart’s Content, Newfoundland, Region 7
1991 1st conference: “Technological Competitiveness”
1995 250th and history recorded (Lionel Barthold)
2002 IEEE Virtual Museum opens
2011 1st IEEE History Center Press Book: Bell Labs Memoirs
2015 Engineering & Technology History Wiki goes live
2016 IEEE REACH program launch
2016 IEEE REACH 5th anniversary
2019 1st IEEE Milestone: Challenge to baffle the Universe

4

IEEE Milestones dedicated in 2020 despite the pandemic.

10

Technology icons’ memories added in IEEE’s expansive Oral History Collection.
Energize innovation by celebrating technological excellence.

Technological innovation pushes the boundaries of thinking, breaks new ground and improves lives. Donations enable the IEEE Foundation to support and celebrate IEEE-wide awards and important activities of the IEEE honor society.

Celebrating the innovators whose groundbreaking technological advances shape our lives and the future of the profession is an honor, privilege and responsibility IEEE takes very seriously. The IEEE Honors Ceremony, an annual highlight that recognizes the accomplishments and contributions of "Technology Giants," was shifted to a social media celebration in 2020. The IEEE Awards Program recognized the 2020 IEEE Medal and Recognition recipients through online promotions. Twenty-three diverse award recipients were honored from around the world and across the broad spectrum of engineering disciplines. From May through August 2020, the Awards Program showcased the recipients—engineers, technologists and practitioners who exemplify the IEEE mission to foster technological innovation and excellence for the benefit of humanity. IEEE’s highest honor, the IEEE Medal of Honor, supported by the IEEE Foundation, recognized Chenming Hu (LFIEEE) “for a distinguished career of developing and putting into practice semiconductor models, particularly 3-D device structures, that have helped keep Moore’s Law going over many decades." Pictured are 2020 IEEE Medal of Honor recipient Chenming Hu, 2020 IEEE Founders Medal recipient Jensen Huang, and 2020 IEEE Haraden Pratt Award recipient Mary Ellen Randall.

With their merger in 2010, IEEE Foundation, IEEE and its honor society, Eta Kappa Nu (IEEE-HKN), created a pathway for IEEE and IEEE-HKN to identify and develop future leaders in the IEEE fields of interest. Ten years, 48 new chapters, 26,000 inductees, and hundreds of thousands of community service hours later, IEEE-HKN is an engine for innovation and excellence. "The leadership of IEEE realized the potential of this merger and many people worked tirelessly to make it happen," says Bruce Eisenstein, 2000 IEEE President, 2010 HKN President (pictured center), who has made a 5-year giving pledge to IEEE-HKN. "We can look with pride at the result today." Also pictured are 2009 President John Vig (left) and IEEE Foundation President Emeritus Richard Gowen (right). A large part of the success and growth of IEEE-HKN, is the dedication of you: our volunteers and supporters. With 265 chapters in 20 countries, the merger with the honor society has provided IEEE a way to reach and bring into its volunteer and leadership ranks the best and brightest students, industry professionals and academics. IEEE-HKN is more than an honor society—it is a lifetime designation and a connection to some of the most talented engineering minds around the world.

248
Technologists celebrated for their life-transforming accomplishments through the presentation of IEEE medals, awards and service recognitions.

45,000
Community service hours logged by IEEE-Eta Kappa Nu Honor Society student members.
As the philanthropic partner of IEEE, the IEEE Foundation inspires an engaged community and leverages the generosity of donors to enable IEEE programs that enhance technology access, literacy, and education and supports the IEEE professional community.

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