

**Karen Bartleson**

**Candidate for 2016 IEEE President-elect**

(The opinions expressed here are the opinions of the authors and not necessarily the position of IEEE.)

**My Position**

As members of the IEEE, we have our profession in common. As members of technical societies and local communities, we have diverse interests, cultures, and needs.



As President of the IEEE, I will work constantly to:

Bring you greater value from your membership

The needs of our practitioners today are equally as important as those of our students and young professionals, our future technologists. I will direct my attention to both, ensuring you are aware of the breadth of member benefits available; encouraging you to take full advantage; and enhancing benefits globally wherever possible.

Bring greater visibility to our profession

We are responsible for the greatest technological advancements of the human race. I will increase our visibility, so we are well-known and highly valued throughout the world. I am involved in three globally-visible initiatives in which IEEE is already making progress. The Internet Initiative's goal is to help restore trust in the Internet, given spying, hacking, identity theft, and other misuses that threaten our way of life. We are becoming involved in global public policy, bringing our expertise to policy makers. Our global standards are enabling technologies and industries such as Smart Cities, the Smart Grid, and the Internet of Things.

Bring the IEEE to more global and local communities

IEEE is growing in regions all over the world, and I believe this is key to our future. There is a difference between IEEE being global – everywhere with uniform goals – and globalizing IEEE – addressing diverse needs at local levels. I will lead IEEE in enabling technologies that span multiple societies, providing technology-related insights into public policy, and using powerful communication tools, so we are both global and globalized.

As President, I will have the responsibility and duty to help guide the IEEE to fulfill our mission of fostering technological innovation and excellence for the benefit of humanity. There are four aspects of my approach for helping the IEEE to continue reaching its goals: the strategic plan, increased visibility, cross-organization coordination, and strong relationships.

A successful organization creates a long-term strategic plan, develops goals and objectives to realize the strategy, then measures its progress and makes appropriate course corrections along the way. The IEEE is creating our updated, long-term Strategic Plan in support of the four IEEE priorities. The four priorities are:

- Ensure that IEEE is prepared for social and technological disruptions that may affect its operations.
- Provide an open forum for discussion, development, and implementation of emerging technologies.
- Leverage IEEE's technology-related insight to provide governments, nongovernmental organizations, and other groups with innovative, practical recommendations to address public policy issues.
- Expand IEEE communities, in which individuals from around the world can share, collaborate, network, debate, and engage with colleagues.

Our Strategic Plan should guide all of our activities going forward. My approach to move the IEEE forward is to ensure that the Strategic Plan is highly visible and well-communicated to the IEEE Board of Directors, IEEE Professional Staff, and leaders throughout the IEEE. All new initiatives and existing activities should support the Strategic Plan, and a discovery exercise upon completion of the Strategic Plan will verify this. The Strategic Plan should not be abandoned or forgotten when a President's term ends. I will work towards making sure that incoming Presidents understand the genesis of the Strategic Plan, its value in keeping the IEEE successful, and its continuity as a guiding influence over the IEEE.

As the IEEE evolves into a truly global organization, public visibility and brand awareness are vital. An IEEE Ad Hoc Committee on Branding has issued a report that should be incorporated into the plans and activities of the IEEE Public Visibility Committee. I volunteered to work on the Public Visibility Committee in 2015, providing me the opportunity to see this through. Driving awareness of the IEEE's accomplishments and mission worldwide can be achieved through a variety of traditional and nontraditional channels, technical and nontechnical publications. Not the least aspect of visibility and awareness is that of communicating within the IEEE membership. We can find opportunities to demonstrate value to IEEE members through greater participation in IEEE activities.

Emerging technologies such as Smart Cities, Connected Vehicles, eHealth, and the Internet of Things cross multiple IEEE Societies, Councils, Operating Units, and committees. It is important that the associated activities and events be well-coordinated throughout the IEEE. For example, as the IEEE Internet Initiative progresses, a working model for cross-organizational harmonization will emerge. This model can be applied where any gaps may exist within the IEEE's major initiatives.

## **Biography**

Karen Bartleson has over 35 years of experience in the semiconductor industry, specifically in electronic design automation. She is currently senior director of corporate programs and initiatives at Synopsys, an electronic design automation company, in Mountain View CA USA. Her responsibilities include creating programs for technical standards development, software tool interoperability, strong relationships with universities and research institutions worldwide, compute platform product support, and customer engagement through social media. She joined Synopsys in 1995 as manager of its standards group, and later was director of quality from 2000-2002. Since 2003, her duties at Synopsys have increased widely, contributing to the company's innovation and success. She represents Synopsys on the Silicon Integration Initiative's Board of Directors and from 2000-2009 was an officer of the Board of Directors of Accellera, which creates, supports, promotes, and advances system-level design, modeling, and verification standards for use by the worldwide electronics industry.

Prior to Synopsys, Ms. Bartleson was CAD manager at UTMC (United Technologies Microelectronics Center), responsible for the design system used to create high-reliability application-specific integrated circuits. Before that, she worked at Texas Instruments as logic analysis manager, responsible for development and support of TI's internal logic simulation products.

Ms. Bartleson was president of the IEEE Standards Association in 2013 and 2014. As president, she led the development of a new strategic plan, furthered the principles of the OpenStand market-driven standardization paradigm, and finalized IEEE's membership in the Global Standards Collaboration. As a member of the IEEE Board of Directors in 2013 and 2014, she chaired and led the development of the strategic plan for the IEEE Internet Initiative committee, whose charter is to raise IEEE's influence and profile in the areas of Internet governance, cyber-security, and cyber-privacy policy development. She was also a member of the IEEE strategy committee, overseeing the development of the role of IEEE in global public policy.

She has published numerous articles about standards and universities. She is the author of the book, *The Ten Commandments for Effective Standards: Practical Insights for Creating Technical Standards*, [Synopsys Press, 2010] and the blog, "The Standards Game". In 2003, she received the Marie R. Pistilli Women in Electronic Design Automation Achievement Award at the 40<sup>th</sup> Design Automation Conference.

Ms. Bartleson earned a B.S. in Engineering Science with a concentration in Electronic Engineering from California Polytechnic State University, San Luis Obispo CA USA, in 1980.

## **Qualifications**

I am a qualified candidate for IEEE President-elect based on many years of experience, leadership, and success in the IEEE Standards Association (IEEE-SA), the IEEE, and the semiconductor industry.

One of the key responsibilities of the IEEE President is ensuring that the IEEE adheres to its Strategic Plan. As a member of the 2014 IEEE Ad Hoc Committee on Strategy and the lead for its “Role of IEEE in global public policy” subgroup, I have been deeply involved in the development of the Strategic Plan and its future execution. In addition, as President of the IEEE-SA and volunteer lead in creating its new 5-year strategic plan, I have worked with the IEEE Ad Hoc Committee on Strategy to ensure alignment of the IEEE-SA plan with the IEEE plan and those of the other IEEE Operating Units.

Being a public spokesperson for the IEEE is a role I am already performing. When the IEEE-SA conducts global outreaches, it represents the entire IEEE, not only IEEE standards. During these outreaches, we meet with government agencies, universities, industry, and other organizations. I have been part of outreach delegations in Brazil, India, China, Korea, Israel, Japan, Switzerland, and Belgium. I have also represented the IEEE and IEEE-SA at global events such as the European Innovation Summit, the Global Standards Collaboration, the International Conference on Connected Vehicles, and SEMI’s Forum on the Internet of Things.

I bring an industry and management perspective that can serve the IEEE well. The IEEE, while being a not-for-profit organization, offers products and services to its members and others outside the IEEE. Our members and other constituents are our customers. Focusing on their needs and delivering value to them is crucial to the ongoing success and vibrancy of the IEEE.

Driving consensus is an essential skill for a standards practitioner, and I have used consensus-building techniques extensively throughout my career to achieve positive outcomes from diverse groups of people.

Among the characteristics I bring to the IEEE, I am a collaborator and a listener – outgoing and respectful of others. I am known by my colleagues as a change agent. I believe in establishing and improving processes for managing large or complex activities. I consider myself well-organized, and I am a proponent of clear and concise thinking and communication.

## **IEEE Contributions**

The five most significant, recent contributions I have made to the IEEE are within: the IEEE Internet Initiative; the role of IEEE in global public policy; the IEEE Standards Association's new strategic plan; IEEE's membership in the Global Standards Collaboration; and the "OpenStand" paradigm for global, market-driven standards.

1. In 2014, the IEEE Board of Directors approved a new initiative for Internet Governance with the goal of restoring trust in the Internet in light of today's adverse conditions of spying, hacking, phishing, identity theft, mass surveillance, and the threat of Internet balkanization. Emerging technologies such as Smart Grid, Connected Vehicles, Smart Cities, Intelligent Homes, and the Internet of Things all rely on an open and globally coherent Internet. I was the chair of the volunteer steering committee for the IEEE Internet Initiative and drove the development of its mission, vision, and strategic plan.
2. Also in 2014, I was a member of the IEEE Strategic Planning Committee which is creating a contemporary strategic plan for the IEEE. I was the leader of the subteam that investigated the role that IEEE can play in global public policy. We developed the goal that IEEE is actively sought by policy makers around the world as a trusted source of unbiased information and balanced, knowledgeable opinions to make an impact on advancing technology for humanity and our profession.
3. Under my leadership, the IEEE Standards Association created a new 5-year strategic plan. The work was completed in less than 6 months, following a highly-effective and inclusive process which demonstrated strong collaboration between volunteers and staff. The plan was approved unanimously by the IEEE-SA Board of Governors in May 2014.
4. For several years, the IEEE-SA had attempted to obtain full membership status for IEEE in the Global Standards Collaboration (GSC). The IEEE had been viewed as a U.S. entity only, not a global standards-development organization. The last formal rejection of IEEE by the GSC was received in 2009. Under my administration as President of the IEEE-SA, the IEEE was finally invited to join the GSC as a full member in 2014.
5. In 2012, the IEEE-SA, along with four organizations that provide standards that make the Internet work freely and openly, announced the "OpenStand" initiative for global, market-driven standards. The principles of OpenStand are: cooperation, adherence to fundamentals (due process, broad consensus, transparency, balance, openness), collective empowerment, availability, and voluntary adoption. I helped drive the initiative, and I speak on this and other standards-related topics at institutions and events around the world.

## **IEEE Activities**

I joined the IEEE as a student member in 1978. Over the years, I've been a strong advocate for the IEEE and have been involved in countless activities of the IEEE. I'm a member of the Computer Society, Women in Engineering, the Standards Association, and the Internet of Things Community. I've also been a member of the Communications Society and the Engineering in Medicine and Biology Society.

I have held many positions within the IEEE, including:

- Member, Global Public Policy Committee 2015
- Member, Public Visibility Committee 2015
- Past President, IEEE Standards Association 2015
- Chair, IEEE Internet Initiative 2014
- Member, IEEE Ad Hoc Committee on Strategy 2014
- Member, IEEE Open Access Summit 2014
- Member, IEEE-SA Ad Hoc Council 2013-2015
- Member, EAB-SA IEEE Standards Education Committee 2013-2014, 2007
- President, IEEE Standards Association 2013-2014
- Member, IEEE Board of Directors 2013-2014
- Member, IEEE-SA Strategy Planning Group 2013-2014
- Chair, IEEE-SA Board of Governors 2013-2014
- Member, IEEE Ad Hoc on Branding 2013-2014
- Member, IEEE Foundation Signature Program Review Committee 2013-2014
- Member, IEEE-SA Finance Committee 2013-2014
- Chair, IEEE-SA Appeals Committee 2013-2014
- Liaison, IEEE-SA to IEEE Women in Engineering 2012-2015
- President-elect, IEEE Standards Association 2012
- President-elect, IEEE Standards Association 2012

- Member, IEEE-SA Board of Governors 2011-2015
- Director-elect IEEE Board of Directors 2011-2012
- Member, IEEE Publication Services and Products Board 2011-2012
- Member, TAB/PSPB Products & Services Committee 2011-2012
- Member, IEEE-SA Nominations & Appointments Committee 2011
- Member, Charles Proteus Steinmetz Award Committee 2010-2012
- Vice Chair, Computer Society Design Automation Standards Committee 2010-2011
- Member, IEEE-SA Awards and Recognition Committee 2010
- Member, IEEE-SA Audit Committee 2010
- Member, IEEE-SA Standards Board 2009-2010
- Member, IEEE-SA Procedures Committee 2009-2010
- Member, IEEE-SA Corporate Advisory Group 2008-2011
- Member, IEEE-SA New Standards Committee 2008-2009
- Treasurer, Computer Society Design Automation Standards Committee 2007-2009
- Member, Computer Society Design Automation Standards Committee 1995-2015

## **Contact Me**

Email: [k.bartleson@ieee.org](mailto:k.bartleson@ieee.org)

Website: <http://www.karenbartleson.net>

LinkedIn: <https://www.linkedin.com/in/karenbartleson>

Facebook: <https://www.facebook.com/KarenBartlesonForIEEEPresident>

Twitter: <https://twitter.com/karenbartleson>

Google+: <https://plus.google.com/+KarenBartleson>