IEEE SA
STANDARDS ASSOCIATION

2022

IEEE STANDARDS ASSOCIATION AWARDS CEREMONY

IEEE

Congratulations to the IEEE SA 2022 award recipients for sharing their knowledge and expertise, reaching in with dedication and perseverance to find the best solutions, and always aspiring to raise the world's standards.

IEEE SA MISSION STATEMENT

Provide a high-quality, market-relevant standardization environment, respected worldwide.

2022 IEEE SA Awards Ceremony Program

Welcoming Remarks

James E. Matthews, President, IEEE Standards Association
Yatin Trivedi, Chair, IEEE Standards Association Awards & Recognition Committee

2022 Awards Honorees

IEEE SA STANDARDS MEDALLION

The IEEE SA Standards Medallion is awarded for outstanding achievement in the development and implementation of standards in electrotechnology. Recipients are selected solely on the basis of their accomplishments in standards work. They need not be members of IEEE, and their contributions may be to standards of other national and international standardization bodies, provided such standards are in the field of electrical and electronics engineering and constitute a significant contribution to the profession.

Recognition consists of a certificate as well as an IEEE SA Standards Medallion and engraved brass plate affixed to a marble paperweight.

Past Recipients

2021
Bob Aiello
Edward Au
Matthew J. Butcher
Geoffrey Garner
S. Michael Gayle
Marc Holness
Peter Zollman

2020
János Farkas
Wenpeng Luan
Thomas A. Prevost
Peter Reid Wilson

2019
Doug Edwards
Kirsten Matheus
Pratap Mysore
Jeff Rearick
Duane Remein
Craig Schlenoff
James Edward Smith

2018
David Chalupsky
Roy D. Cideciyan
Paul R. Croll
Alan Flatman
Rich Kennedy
Bernard Metzler
Stephen Shull

2017
Mark Adamiak
Alfred Asterjadhi
Jeffrey A. Burnworth
Carlos Cordeiro
Benjamin Cotts
Chengwei Dai
Victor Huang
Charles W. Johnson, Jr.
Glen Kramer
Leonardo Lima
Richard Mellitz
Bertrand Poulin
George Zimmerman

2016
Bruce B. Barrow
Kerry Blinco
Ted A. Burse
Carole C. Carey
Sudhakar E. Cherukupalli
Robert S. Fish
James R. Frysinger
Anthony Ki Cheong Ho
Abhay Karandikar
Brad Lehman
Michael J. Thompson
Mehmet Ulema
Michael W. Wactor
C.T. (Tim) Wall
Jan J. Wittenber

2015
William J. Bergman
Alfred Crouch
Chris DiMinico
Vinko Erceg
Alexander D. Gelman
Stephen Haddock
Apurva N. Mody
Paul S. Schluter

2014
Pete Anslow
Malcolm Clark
Jean-Philippe Faure
Norman Finn
Lowell Johnson
Jim LeClare
Ken Martin
Brian Reinhold
David Stone
Philip Winston

2013
Hanna Abdallah
Mike Bennett
Kenneth Brown
Christopher Clark
John D'Ambrosia
Wael Diab
Ramsis Girgis
Adam Healey
Oleg Logvinov
Albert Martin
Robin Tasker
James Wilson

2012
Douglas P. Bogia
Michael Champagne
Philip J. Hopkinson
James Liming
Robert S. Nowell
Purva R. Rajkotia
Anne-Marie Sahazizian
Adrian P. Stephens

2011
Tom Alderton
Thomas Basso
Jeffrey G. Gilbert
Connie Komomua
John E. Merando, Jr.
Michael Seavey
Frank Waterer

2010
James D. Allen
Percy E. Pool

2009
John L. (Jack) Cole
Guido Guertler
Michael Johas Teener

2008
Don O. Koval
Elliot Rappaport
Donald A. Voltz

2007
Raymond C. Hill
Susan K. Land
Carl Lindquist
Albert R. Martin
Michael Maytum
Arthur G. Varanelli

Additional past recipients: https://standards.ieee.org/about/awards/med/index.html

IEEE SA STANDARDS MEDALLION

Stephen Antosz

RECOGNITION

For continuing long-term leadership and contributions to the development of transformer standards

HIGHLIGHTS

Stephen Antosz, an IEEE Senior Member, is currently President of Stephen Antosz & Associates, Inc., a transformer consulting firm providing engineering services to users of power transformers, namely design reviews, factory inspection, and factory acceptance test witness.

He has been an active participant of the IEEE Power & Energy (PES) Society's Transformers Committee since 1994; a member since 2000; and involved in numerous task forces, working groups, and subcommittees over the years. Previously, he was technical editor for IEEE Transactions on Power Delivery (TPWRD) and chair of the Performance Characteristics Subcommittee. He was the transformer representative to IEEE PES Technical Council. He was task force secretary for the joint task force between the Transformers Committee and Technical Council, whose major output was an industry article published in the July/August 2013 issue of *IEEE Power & Energy* magazine on the subject of geomagnetic disturbances and their impact on the power grid.

Stephen served as a Transformers Committee officer for eight years, culminating as chair of the Transformers Committee in 2016-2017. He has been chair of the IEEE PC57.12.90 Working Group since 2000 and is Chair of the IEEE PC57.136 Working Group. Stephen received his bachelor's degree in electrical engineering from Point Park University and his master's degree in business administration from the University of Pittsburgh.

IEEE SA STANDARDS MEDALLION

Sara R. Biyabani

RECOGNITION

For leading the development of IEEE P1924.1™-2022

HIGHLIGHTS

Sara R. Biyabani is a computer architect with expertise in the design, modeling, and performance optimization of specialized hardware accelerators and computer platforms. She has delivered industry-leading products ranging from CPUs, ASICs, handhelds, and embedded and graphics systems to datacenter servers and supercomputer interconnects. She works at the intersection of hardware and software to optimize systems for specific applications.

She is the founder and Chief Technical Officer of an emerging technologies startup and works on standardization efforts in interdisciplinary areas covering digital and analog hardware, software (operating systems and machine-learning frameworks), radio-transmitter technologies, distributed computing, and IoT and communications networks for smart grid and electric vehicle charging.

Sara is an IEEE Senior Member and active in the IEEE Computer, Communications, and Power & Energy Societies and IEEE Standards Association, serving on the IEEE SA Standards Board Review Committee. She is Vice Chair of the IEEE SmartGrid Program. She has contributed in different roles in standards development, serving as a working group member, technical lead, vice chair, chair, and industry host. She has participated in taking several standards from development to publication: IEEE 1924.1™-2022, IEEE 1923.1™-2021, IEEE 2030.2™-2015, and IEEE 2030™-2011.

Sara has a master's degree in electrical and computer engineering and a bachelor's degree in physics and computer science. She holds a patent in unified memory architecture design.

IEEE SA STANDARDS MEDALLION

Matt Brown

RECOGNITION

For exceptional leadership and contributions to the development of IEEE 802.3™ Ethernet standards

HIGHLIGHTS

Matt Brown is a member of the system engineering group in the Huawei High-Speed Interface IP development group located in Ottawa, Canada. His career spans 35 years of hardware design and system engineering in communication systems and high-speed integrated circuits.

Matt has been an active participant in IEEE P802.3™ Ethernet standards development for the last 17 years, starting with the IEEE P802.3ap™ Ethernet backplane project. In recent years, Matt was chief editor for IEEE P802.3b™j (100G backplane and copper cable), IEEE P802.3by™ (25G Ethernet), IEEE P802.3cd™ (50G Ethernet), and IEEE P802.3ck™ (100 Gb/s per lane electrical interfaces), and he is currently chief editor for IEEE P802.3df™ (800G and 1.6T Ethernet).

IEEE SA STANDARDS MEDALLION

Cheng-Jen (Allen) Chen

RECOGNITION

For leadership as standards chair of the IEEE Industrial Electronics Society

HIGHLIGHTS

Cheng-Jen (Allen) Chen has extensive technical and managerial experience in the computer, electronic consumer product, and wireless communication industries and has significantly contributed to multiple product developments. Presently he provides technical consulting services at Innovatech Solutions.

He was vice president at Teleion Wireless, where he built a research and development team to develop wireless data modules for smart phones. He retired from Lucent Technologies after 20 years of service and joined Auctor Corporation as a senior manager, where he managed the development of multiple embedded consumer products. At AT&T Bell Laboratories (then Lucent Technologies), Allen contributed to the development of BELLMAC 32-bit CMOS microprocessor chip sets and call processing subsystems for CDMA-based stations.

Allen is an IEEE Life Senior Member and an Industrial Electronics Society (IES) Life AdCom member. Presently he chairs the IES Standards Technical Committee where he manages development of 34 standards. He has served IES in various capacities, including treasurer and general chair and program chair for IES conferences. Allen co-initiated and co-organized interoperability plugfests at IES conferences to demonstrate the interoperability of IES standards and centers of expertise to provide services to its proximities and offer industry partners opportunities for standards compliance and interoperability testing for their products.

He has had more than 30 technical papers published and has given technical presentations worldwide. Allen holds a master's degree in electrical and computer engineering (ECE) from the University of North Dakota and PhD in ECE from the University of Wisconsin, Madison.

IEEE SA STANDARDS MEDALLION

Paul T. Congdon

RECOGNITION

For long-term advocacy and for significant contributions that advanced Ethernet bridging technologies in the data center

HIGHLIGHTS

Paul T. Congdon is a co-founder and the Chief Technology Officer (CTO) of Tallac Networks. He has more than 37 years of experience in the networking industry and has become a widely esteemed speaker, inventor, and leader in the computer networking industry.

Prior to Tallac Networks, Paul was CTO of the HP ProCurve Networking Business and a Fellow at Hewlett Packard's Networking and Communications Labs with responsibility for HP's research in data centers, mobility, wireless, and SDN network infrastructure. Paul leads, chairs, and contributes widely to industry standards in IEEE and the Internet Engineering Task Force. Paul has a PhD in computer science from the University of California, Davis.

IEEE SA STANDARDS MEDALLION

Jeffrey A. Fordham

RECOGNITION

For continuous leadership of the revision of IEEE 149™-2021

HIGHLIGHTS

Jeffrey A. Fordham is Vice President of Precision Products for NSI-MI Technologies, where he is responsible for company product development, sales, production, and supply for software, microwave instrumentation, antennas, and mechanical positioning equipment. He also manages the calibration and testing business function of the company.

Jeff holds master's and bachelor's degrees in electrical engineering from Georgia Institute of Technology. He has been a member of the IEEE Antennas and Propagation Society and the IEEE Microwave Theory and Techniques Society since 1987 and is a member of the IEEE Standards Association. He previously served as chapter chair for the Atlanta chapter of IEEE Antennas and Propagation/Microwave Theory and Techniques.

Jeff chaired the IEEE P149 Working Group, the committee responsible for updating IEEE Recommended Practice for Antenna Measurements that was approved in 2021. He is currently secretary for the IEEE P1720 Working Group tasked with revising IEEE Recommended Practice for Near-Field Antenna Measurements.

Jeff was awarded the Edmond S. Gillespie Fellowship by the Antenna Measurements Techniques Association (AMTA) in 2016. He currently serves as secretary of the AMTA Board of Directors and previously served on the AMTA Board of Directors as the host of the AMTA 2004 symposium.

IEEE SA STANDARDS MEDALLION

Ruth Lewis

RECOGNITION

For leadership in promoting the development of IEEE technology and society standards

HIGHLIGHTS

Ruth Lewis is an experienced strategic IT consultant, qualified futurist, and professional engineer based in Melbourne, Australia, having worked across many industries, sectors, and technologies with a particular focus on the innovative and ethical use of digital technology in business and in society. Ruth's career has spanned 30 years developing and designing IT solutions for her clients as a network engineer, senior technical consultant, solutions architect, business analyst, and technology foresight professional.

Her expertise is in introducing new technologies to business, creating managed services, and creating innovative governance models within organizations. Ruth's passion is to work toward the ethical and sustainable development and use of technology for the good of society, enabling her clients to make wise and informed decisions and investments today to enable their preferred futures.

Ruth is the Chair of the IEEE Society on Social Implications of Technology (SSIT) Standards Committee, is a member of the IEEE Standards Association's AsiaPac Regional Advisory Group, is the standards coordinator for the IEEE SSIT Australia and IEEE Victoria Sections, and was an active member of the working group that developed IEEE 7000™-2021, IEEE Standard Model Process for Addressing Ethical Concerns during System Design.

Ruth has a bachelor's degree in electrical engineering and a graduate diploma in digital communications.

IEEE SA STANDARDS MEDALLION

Adam W Ley

RECOGNITION

For significant contributions to IEEE test technology standards

HIGHLIGHTS

Adam W Ley is Vice President and Chief Technologist for ASSET InterTech, Inc. In this role, Adam ensures that ASSET's non-intrusive board test (NBT) methodologies comprise a best-in-class solution to meet the evolving need for improved coverage of board tests in the face of ongoing erosion of physical access. ASSET's staunch support for standards has granted Adam ample opportunity to participate in developing IEEE test technology standards.

Adam joined the development of IEEE standards starting with IEEE P1149.1™ approximately 20 years ago, serving as vice chair, North America, and as technical editor for IEEE 1149.1™-2001. Adam also participated in IEEE 1149.1™-2013 and has engaged in efforts toward the next revision. Adam has contributed to many other test technology standards, including IEEE 1149.7™-2022, IEEE 1500™-2022, IEEE P1149.4™, IEEE P1450™, IEEE P1581™, and IEEE P1687™.

Adam joined the IEEE Test Technology Technical Committee circa 1992 and has served on the IEEE Test Technology Standards Committee (TTSC) since about 1993. Adam is presently Vice Chair of the TTSC, having previously served as secretary.

Adam's experience prior to ASSET spanned more than a decade at Texas Instruments, where he had roles in application support for TI's boundary-scan logic products and for test and characterization of new logic families. Adam earned his bachelor's degree in electrical engineering from Oklahoma State University.

Gary Nicholl

RECOGNITION

For longtime technical and editorial leadership of IEEE 802.3™ Ethernet standards

HIGHLIGHTS

Gary Nicholl is a Principal Engineer in Cisco's Optics and Optical Systems Group, where he is responsible for optical interconnect technology and strategy.

Gary also represents Cisco at various industry standards organizations and was an active contributor in the development of 25G, 40G, 100G, and 400G standards at IEEE, the Optical Interworking Forum (OIF), and the International Telecommunications Union. He was a clause editor for IEEE P802.3cd™ (50 Gb/s, 100 Gb/s, and 200 Gb/s Ethernet) and chief editor for IEEE P802.3cu™ (100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per wavelength).

Gary was also a member of the core team responsible for developing the common management interface specification (CMIS), which is widely used throughout the industry for next-generation pluggable optical modules. He was recently appointed Co-Vice Chair of the OIF Physical Link Layer Working Group–Management to continue his leadership role in evolving the CMIS specification. Gary also currently serves as Treasurer/Secretary for OIF.

Prior to joining Cisco, Gary spent 10 years at Nortel Networks in Ottawa, working in various research and development roles in the development of OC-3, OC-12, and OC48 optical transport products. Gary holds a bachelor's degree in electrical engineering from the University of Manchester (UK).

IEEE SA STANDARDS MEDALLION

Mark Nowell

RECOGNITION

For leadership, technical expertise, and the provision of sage guidance through many IEEE 802.3™ Ethernet projects

HIGHLIGHTS

Mark Nowell is a Cisco Fellow in Cisco's Optics and Optical Systems Group. His focus is on next-generation interconnect technology innovation to meet Cisco's needs. Mark is also active within industry standards and forums and has chaired multiple IEEE P802.3™ Ethernet projects. He represents Cisco on various industry alliances and consortia.

Mark also chairs or co-chairs a number of industry multi-source agreement (MSA) groups focusing on next-generation optical module form factors (QSFP-DD, QSFP-DD800, OSFP) and optical interface signaling technology (100G Lambda MSA). Before Cisco, Mark worked at Hewlett-Packard Research Labs.

Mark earned his bachelor's and master's degrees at Queen's University in Kingston, Canada, and his PhD at Cambridge University in Cambridge, UK.

IEEE SA STANDARDS MEDALLION

Yonghong Tian

RECOGNITION

For exceptional leadership and skill in driving the development of IEEE standards on AI model representation, and compression and analysis-oriented visual data coding

HIGHLIGHTS

Yonghong Tian is currently the Dean of the School of Electronics and Computer Engineering and a Boya Distinguished Professor with the School of Computer Science at Peking University and is also the Deputy Director of the Artificial Intelligence Research Department at PengCheng Laboratory, Shenzhen, China.

His research interests include neuromorphic vision, distributed machine learning, and multimedia big data. He is the author or co-author of more than 300 technical articles in refereed journals and conferences. He is a Fellow of IEEE, a senior member of the Chinese Institute of Electronics and the China Computer Federation, and a member of the Association for Computing Machinery.

Yonghong has rich experience and has made outstanding contributions in standards development in the fields of visual data analysis and coding and artificial intelligence. He is the Vice Chair of the IEEE C/Data Compression Standard Committee, the Chair of the IEEE P2941 Working Group, and the Chair of the Working Group of the Chinese Standards for AI Model Compression in the Audio Video Coding Standard (AVS) Working Group of China.

He is also the key technical editor of IEEE 1857a™-2014 and IEEE 1857.6™-2018, and he serves as the co-editor of ISO/IEC DIS 39794-16. The standardized technologies contributed by his team have been widely adopted in industry and played a key role in real-world systems, products, and applications.

IEEE SA STANDARDS MEDALLION

Gary Touryan

RECOGNITION

For long-term leadership of the IEEE Traction Power Standards Committee

HIGHLIGHTS

Gary Touryan is a professional engineer with more than 45 years of experience in transit and rail engineering. Gary champions sharing technical expertise through professional societies, and he is an advocate of mentoring and training the future leaders of our industry.

As an executive in consulting firms, Gary has led technical professionals specializing in all aspects of systems engineering, including traction power, overhead contact systems, corrosion control, trackwork, train control/signaling, communications, fare collection, rail operations, and safety.

As a project manager, Gary has supervised large multi-disciplinary teams on a variety of transportation infrastructure projects for major mass transit and rail agencies. He has managed the delivery of all phases of capital projects, from the initial planning and all stages of the design to construction management, testing, commissioning, and project activation.

Gary implemented the successful total quality management training program at one of the first engineering firms to achieve ISO 9001 certification.

Gary was chair of IEEE Traction Power Substations Standards Committee for 18 years, during which it developed several standards, recommended practices, and guides that currently govern the manufacturing, supply, installation, testing, commissioning, and operation of traction power substations and equipment in the U.S. and Canada. He also led the committee's efforts to coordinate with the American Public Transportation Association, American Railway Engineering and Maintenance-of-Way Association, and within IEEE to develop standards and the industry best practices.

THE RON WAXMAN DESIGN AUTOMATION STANDARDS COMMITTEE MERITORIOUS SERVICE AWARD

The Design Automation Standards Committee (DASC) is responsible for the standardization of design automation-related standards in the IEEE Standards Association. This award is named for Ron Waxman, a founder of the DASC, in recognition of his many years of leadership and service to IEEE and international standards.

The annual Ron Waxman DASC Meritorious Service Award recognizes commendable accomplishments by DASC members. The DASC Awards Committee calls for nominations and selects the recipient per the DASC Policies and Procedures. The DASC membership confirms the selection.

Recognition consists of an engraved wooden plaque.

Past Recipients

2021
Riccardo Mariani

2020
John Biggs

2019
Ernst Christen

2018
Karen Bartleson

2017
Karen Pieper

2016
Yatin Trivedi

2015
Erich Marschner

2014
Dennis Brophy

2013
Victor Berman

2012
Stan Krolikoski

2011
Larry Saunders

2010
Hal Carter

2009
Peter Ashenden

2008
John Hines

2007
Gabe Moretti

THE RON WAXMAN DESIGN AUTOMATION STANDARDS COMMITTEE MERITORIOUS SERVICE AWARD

Tom Fitzpatrick

RECOGNITION

In Recognition of Outstanding Service Exemplifying the Spirit of The DASC

HIGHLIGHTS

Tom Fitzpatrick is a Strategic Verification Architect at Siemens Digital Industries Software (Siemens EDA), where he works on developing advanced verification methodologies, languages, and standards. He has been a significant contributor to several industry standards that have dramatically improved the functional verification landscape over the last 25 years, including Verilog (IEEE 1364™), SystemVerilog IEEE 1800™), and Universal Verification Methodology (UVM) (IEEE 1800.2™).

Tom is a founding member and current Vice Chair of the Accellera Portable Stimulus Working Group and currently serves as the Chair of the IEEE P1800 and Accellera UVM-AMS Working Groups. In 2019, he received the Accellera Technical Excellence Award in recognition of his many contributions over the years. He has published multiple articles and technical papers on a wide variety of functional verification topics and has produced some of the most popular and successful video training courses on Siemens' Verification Academy website. Tom is a long-time member of the Design and Verification Conference U.S. Steering Committee and is a member of the Design Automation Conference Executive Committee.

Tom holds master's and bachelor's degrees in electrical engineering and computer science from MIT.

IEEE SA CONFORMITY ASSESSMENT AWARD

This award is presented to an individual or entity to recognize major contributions to the development and promotion of IEEE standards products through conformity assessment activities. Major contributions include, but are not limited to, the following examples:

- Leadership in developing new IEEE conformity assessment and certification programs
- Enhancing the visibility of IEEE conformity assessment and certification programs
- Promoting the understanding and application of conformity assessment programs as a means of accelerating market adoption of IEEE standards
- Leading and contributing toward development of innovative test tools, test suites, and test methodologies

Recognition consists of an engraved wooden plaque.

Past Recipients

2021
IEEE NPEC Conformity Assessment Steering Committee

2020
CHAdeMO Association

2019
Duke Energy

2018
Keith Houser
Ethernet Alliance

2017
Allen R. Goldstein

IEEE SA CONFORMITY ASSESSMENT AWARD

David C. Klonoff

RECOGNITION

For vision in promoting the development of a conformity assessment program to aid medical device manufacturers and users in managing their cybersecurity risk

HIGHLIGHTS

David C. Klonoff is an endocrinologist specializing in the development and use of diabetes technology. He is Medical Director of the Dorothy L. and James E. Frank Diabetes Research Institute of Mills-Peninsula Medical Center in San Francisco and a Clinical Professor of Medicine at the University of California at San Francisco.

David received the American Diabetes Association's 2019 Outstanding Physician Clinician Award. He received an FDA Director's Special Citation Award in 2010 for outstanding contributions related to diabetes technology. In 2012, David was elected as a Fellow of the American Institute of Medical and Biological Engineering and cited as among the top 2% of the world's bioengineers for his engineering work in diabetes technology.

He received the 2012 Gold Medal Oration and Distinguished Scientist Award from the Dr. Mohan's Diabetes Specialities Centre and Madras Diabetes Research Foundation of Chennai, India. David is the founding editor-in-chief of Journal of Diabetes Science and Technology. He has authored more than 300 publications in PubMed journals, including four of the first ten articles on diabetes device cybersecurity.

IEEE SA INTERNATIONAL AWARD

This award is presented to an IEEE SA individual member who has made extraordinary contributions to the advancement of the international goals of the IEEE SA, and to establishing the IEEE SA as a world-class leader in standardization.

Recognition consists of a globe paperweight and certificate.

Past Recipients

2021
Jingxuan (Joanne) Hu

2019
W. Charlton (Chuck) Adams, Jr.
Teresa Doran
Cheryl Jones
Vikass Monebhurrun

2018
Leslie T. Falkingham
William Whyte

2017
Giorgi Bit-Babik
Craig A. Colopy

2016
Anne A. Bosma

2015
Bill Long
J. Patrick Reilly

2014
Melvin Reynolds
John White

2013
Andrew Myles

2012
David John Law

2011
Bertram Jon Klauenberg

2010
Robert F. Heile

2009
James R. Michalec
David T. Stone

2008
Hermann Koch

2007
James W. Moore

2006
Ben C. Johnson
Roger B. Marks

2005
Denis L. Dufournet
Carl R. Stevenson

2004
Michael R. Murphy

2003
Ronald C. Petersen

2002
Wallace S. Read

IEEE SA INTERNATIONAL AWARD

Richard H. Hulett

RECOGNITION

For outstanding long-term contributions in establishing IEEE SA trace heating standards internationally

HIGHLIGHTS

Richard H. Hulett received his bachelor's and master's degrees in mechanical engineering from Stanford University. Following graduation, he joined Raychem Corporation and was involved in developing performance ratings and long-term reliability on new technology self-regulating heating cables. As a technical director in the 1980s, Richard led an effort to increase the safety of electrical heat tracing systems in industrial applications.

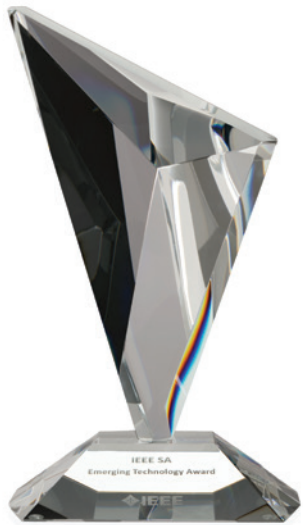
After joining Thermon Manufacturing in 1994, Richard worked on characterizing new metal alloy heat tracing capabilities; and as vice president of electrical products, he worked on advancing conductive polymer heating technology. He is currently a Senior Consultant for Thermon Manufacturing.

Richard joined IEEE at the 1976 Philadelphia Industrial Applications Society/ Petroleum and Chemical Industry Committee Conference and started his involvement in standards in 1978 as a member of the IEEE P515 Working Group for industrial heat tracing. Subsequently, as chair of IEEE P515, he provided leadership for four revisions of the standard. He also participated in Canadian Standards Association (CSA) and International Electrotechnical Commission (IEC) heat tracing standards development. In 2015, IEC/IEEE 60079-30, a joint standards development effort for which Richard was IEEE maintenance team chair, was published.

In 2001, Richard joined the IEEE SA Standards Board (SASB). In his 14 years on the IEEE SASB, he also served as a member of its Standards Review, New Standards, and Procedures Committees, as chair of the Procedures Committee, as IEEE SASB chair, and as a member of the IEEE SA Board of Governors.

Richard has authored or co-authored 15 technical papers, holds two patents, and is a Life Fellow of IEEE.

IEEE SA EMERGING TECHNOLOGY AWARD



This award is presented to an individual, working group, or company that has advanced, initiated, or progressed a new technology within the IEEE SA open consensus process that meets the following criteria: The IEEE SA work product is a balloted standards draft or an approved standard, recommended practice, or guide. It is not necessary for the final document to be approved, but substantial progress beyond the Project Authorization Request (PAR) is necessary.

The IEEE SA work product:

- Is the first or one of few such activities for the technology, industry, or market(s) for which it is targeted
- Is a technology, industry, or market where broad consensus agreements are not yet widely deployed or not yet fully commercialized
- Has positive market relevance
- Puts IEEE in a leadership position
- Extends the IEEE SA standards portfolio

Recognition consists of an engraved sculpture and a certificate.

Past Recipients

2021
IEEE P2675 Working Group
IEEE P7007 Working Group

2020
IEEE 802.1 Working Group

2019
IEEE 1876 Working Group

2018
Lee Coulter
IEEE 802.3 Working Group

2017
Erik Jan Marinissen
IEEE 802.11 Working Group

2016
Giovanni Acampora
Stephen F. Bush

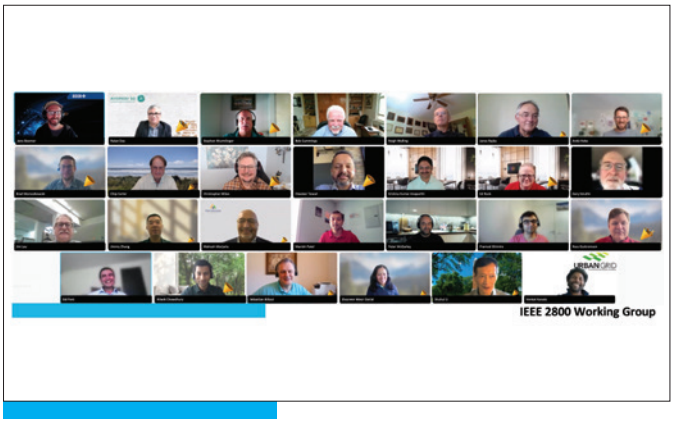
2015
IEEE Robotics and Automation Society Ontologies for Robotics and Automation Working Group

2014
Yuan-Ting Zhang
IEEE P2700™ Standard for Sensor Performance Parameter Definitions Working Group

2013
Pierre Martin

2011
IEEE 802.22 Working Group

2010
IEEE 11073™ Personal Health Devices Working Group
IEEE Rail Transit Vehicle Interface Standards Committee Working Group #2



IEEE 2800 Working Group

RECOGNITION

For the development of uniform technical requirements applied to inverter-based generation resources interconnecting with electric transmission and sub-transmission systems

HIGHLIGHTS

The IEEE 2800 Working Group is a diverse group of more than 175 subject matter experts in the evolving area of interconnection and interoperability of large inverter-based resources (IBRs) like solar, wind, and energy storage plants. Its members are engineers and practitioners from various industry stakeholders such as IBR equipment or supplemental devices manufacturers, project developers, transmission planning entities, grid operators, consultancies, research organizations, and energy regulators.

Realizing an urgent need in 2018, the working group used the IEEE Standards Association's open and balanced standards development process and built—in just three-years—a strong industry consensus on a first-of-its-kind uniform set of technical minimum requirements for the interconnection, capability, and performance of IBRs interconnecting with electrical transmission and sub-transmission systems. More than 400 balloters from across the industry reviewed the draft, and IEEE 2800™-2022 ultimately reached a 94% approval rate. The standard puts forth high expectations for capabilities and technical performance of future IBRs and provides flexibility for regional adaptation and IBR response configuration.

IEEE 2800™-2022, which was published on Earth Day in April 2022, is expected to have a positive market impact because it can provide—for the very first time—clarity and planning security for both IBR developers and transmission planners across North America, and possibly other continents. The standard reduces uncertainty and can increase efficiency and reliability in renewable energy resource interconnection processes and modeling, thereby supporting the ongoing transition toward a reliable decarbonized electricity grid.

IEEE 2846 Working Group

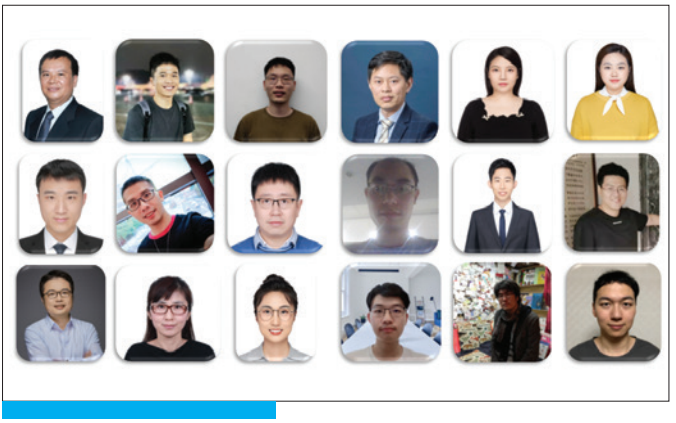
RECOGNITION

For the development of IEEE 2846™-2022, IEEE Standard for Assumptions in Safety-Related Models for Automated Driving Systems

HIGHLIGHTS

Automated vehicle technology holds the promise of providing safe, efficient, cost-effective transportation to millions of people around the world. Unlocking the full potential of this technology requires solving technological challenges that benefit from the exchange of ideas, debate, alignment, and maturation that can only be achieved through collaboration with all the stakeholders involved. The IEEE 2846 Working Group gathers representation from automotive original equipment manufacturers, Tier 1 suppliers, mobility-as-a-service providers, universities, and governments globally, providing a platform to build consensus on reasonably foreseeable behavior of road users to guide automated driving systems in perception, prediction, and planning.

Government and industry alike are in need of an open, transparent, and technology neutral standard that provides industry consensus guidance on identifying reasonable and foreseeable assumptions used by models in specific scenarios useful for evaluating the performance of an automated driving system. IEEE P2846™ aims to fulfill this need.



IEEE 2941 Working Group

RECOGNITION

For the development of IEEE 2941™-2021, the standard to define AI development interfaces that break down barriers between computing architecture and algorithm frameworks

HIGHLIGHTS

The IEEE 2941 Working Group was approved by the IEEE Standards Association in September 2020 to work under the IEEE Data Compression Standard Committee, and the working group's first standard was approved in 2021. With decades of experience in the artificial intelligence (AI) field, the working group members aimed to define the AI model representation interface and break down the AI model's barriers between different computing architecture and algorithm frameworks.

The working group is made up of experts with representation from many different industries. Members include systems and software engineers, academic professors, students, technical consultants, and other hands-on technology professionals.

The working group plans to develop a series of standards around AI models to meet the needs of the industry. In addition to IEEE 2941™-2021, the working group will soon complete work on a standard concerning AI operator interfaces, with more standards in development.

IEEE SA LIFETIME ACHIEVEMENT AWARD

This award is presented to a current or past member of the IEEE Standards Association who has made a significant technical contribution in a standards committee and has shown a 15-plus year commitment to standards development within IEEE and other national and international standardization activities.

Recognition consists of a sculpture and framed certificate.

Past Recipients

2021
Curtis Ashton
Ben C. Johnson

2020
Chung-Kwang Chou
Howard Wolfman

2019
Garry Roedler

2018
T. W. (Ted) Olsen

2017
Philip J. Hopkinson

2016
Michael Johas Teener

2015
Mick Seaman

2014
Todd Cooper
Gary Robinson

2013
Richard DeBlasio
Tony Jeffree

2012
Francois Martzloff

2011
Joseph L. Koepfinger

IEEE SA LIFETIME ACHIEVEMENT AWARD

Steven B. Carlson

RECOGNITION

For efforts to expand Ethernet into the vehicular networking, non-traditional power over Ethernet, and commercial lighting/energy management and building automation spaces

HIGHLIGHTS

Steven B. Carlson is the President of High Speed Design, Inc., a Portland, Oregon-based consulting company. Stephen has more than 49 years of experience in embedded control systems and networking for the entertainment, architectural lighting, energy management, and automotive industries. His products have been used in live theatre, motion picture and television studios, themed entertainment, and commercial buildings.

He is the current Chair of the IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force; chaired the task forces for IEEE P802.3ch Multi-Gigabit Automotive Ethernet PHY, IEEE P802.3bp 1000BASE-T1, and IEEE P802.3bw 100BASE-T1; and is the Executive Secretary of the IEEE P802.3 Ethernet Working Group. Steven previously served as the chair of the IEEE DTE power via MDI project that became IEEE 802.3af™-2003, usually referred to as "Power over Ethernet;" was a member of the IEEE 802.3bf™-2011 Time Sync Task Force; and was a founder of the Entertainment Services and Technology Association's Technical Standards Program, ANSI E1-Entertainment Technology.

Steven is the creator of the "2032: A Martian Odyssey" standards training game for the IEEE SA. He is also a member of the Illuminating Engineering Society's Control Protocols working group and was a contributor/author to IES ™-23-11, "Lighting Control Protocols," and co-authored the United States Institute for Theatre Technology (USITT) DMX/512 standard (1986).

IEEE SA LIFETIME ACHIEVEMENT AWARD

Norman Finn

RECOGNITION

For a career devoted to relentlessly advancing a multitude of IEEE 802.1™ technologies, from foundational to key components of Ethernet bridging to the time-sensitive networking toolset

HIGHLIGHTS

After receiving his bachelor's degree in astronomy from the California Institute of Technology, Norman Finn worked for 15 years creating real-time operating systems. He then got into networking by joining a gigabit networking startup, Ultra Networking Technologies, in 1987. From 1993 he was employed by Cisco Systems, retiring as a Cisco Fellow in 2016. Norm has been consulting since that time. Active in IEEE P802™ since 1996, he has served as an editor of nine standards in IEEE P802.1™ and one in IEEE P802.11™. Norm has made more than 100 technical and liaison contributions over the years, starting with the origins of IEEE P802.1Q™ virtual local area networks, and to numerous projects in IEEE P802.3™, IEEE P802.17™, and IEEE P802.11™.

Norm has also participated meaningfully in the International Telecommunications Union (ITU-T Y.1731), the AVnu Alliance, and the Internet Engineering Task Force, where he was instrumental in the creation of the deterministic networking working group. At present, his focus is on expanding deterministic networking into mixed routed and bridged networks.

In addition to his standards activity, Norm has been awarded more than 100 patents. His publications include three IEEE magazine articles and a book chapter.

IEEE SA LIFETIME ACHIEVEMENT AWARD

Annette D. Reilly

RECOGNITION

For contributions to the international standardization of information development and software engineering processes

HIGHLIGHTS

Annette D. Reilly, a Senior Life Member of IEEE, is a leader in defining, modernizing, and standardizing systems and software engineering (SSE) concepts, principles, and processes. An active volunteer in standards development and management for more than 25 years, she joined the IEEE Computer Society (CS) Systems and Software Engineering Standards Committee (S2ESC) in 2001, and she is currently serving as IEEE CS Vice President for standards. She has served as a working group chair, editor, co-editor, or major contributor for 18 standards.

Annette designed and edited ISO/IEC/IEEE 24765, Systems and software engineering—Vocabulary, a unique database standard (www.computer.org/sevocab). She has led and managed U.S. participation in International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) systems and software engineering (SSE) standardization, as well as IEEE's involvement in joint standardization with ISO/IEC Joint Technical Committee (JTC) 1/Subcommittee (SC) 7 and ISO/IEC Joint Working Group 16, involving 15 or more project editors in joint projects. Annette's leadership as IEEE CS society representative and as ISO/IEC JTC 1/SC7 convenor has produced 42 joint ISO/IEC/IEEE standards among the 53 active standards of S2ESC. The result is a consistent, globally relevant set of SSE standards for both organizations.

Annette retired from a 31-year career at Lockheed Martin, where she held responsibilities for proposal management, engineering management, systems engineering, and information management. She developed technical and management solutions and proposals for major ITC domestic and international government customers. Annette received her bachelor's degree from Rice University, master's degrees from Brandeis University and The George Washington University, and her PhD from Brandeis University.

IEEE SA LIFETIME ACHIEVEMENT AWARD

Richard A. Tell

RECOGNITION

For more than 50 years of outstanding contributions to the science and technology of non-ionizing radiation safety, and for developing standards for measurement methods, safety programs, and exposure limits

HIGHLIGHTS

Richard (Ric) A. Tell, a Life Fellow of IEEE, received his bachelor's degree in physics from Midwestern State University and his master's degree in radiation sciences from Rutgers University. He has 55 years of experience working on radio frequency (RF) safety issues, first at the U.S. Environmental Protection Agency for 20 years, where he served as chief of the agency's electromagnetics branch, and since then in his own scientific consulting business.

His specialty areas include RF safety, RF field exposure assessment, antenna analysis, and field measurements that help clients evaluate compliance with applicable standards and establish RF safety programs within their companies. He became an IEEE Fellow "for contributions to assessment and safety standards for human exposure to radio frequency energy."

He has been a member of the National Council on Radiation Protection and Measurements and serves as Chair of Subcommittee 2 of the IEEE International Committee on Electromagnetic Safety that published IEEE C95.7™, IEEE Recommended Practice for Radio Frequency Safety Programs, and IEEE C95.2™, IEEE Standard for Radio Frequency Energy and Current-Flow Symbols. Ric is also Chair of the Committee on Man and Radiation in the IEEE Engineering in Medicine and Biology Society. He is the recipient of the 2019 Non-Ionizing Radiation Distinguished Service Award from the Health Physics Society.

IEEE CHARLES PROTEUS STEINMETZ AWARD

The IEEE Charles Proteus Steinmetz Award was established by the Board of Directors in 1979 for major contributions to the development of standards in the field of electrical and electronics engineering. The award is named in honor of Charles Proteus Steinmetz's theories, which were essential to the development of universal electrical systems. His textbooks, formulas, teachings, and research, principally at the General Electric Company, made him the first true theoretician of alternating-current electrical systems.

Recognition consists of a bronze medal, certificate, and honorarium.

Past Recipients

2021
Haran Karmaker

2020
Solveig M. Ward

2019
Innocent Kamwa

2018
Craig M. Wellman

2017
David John Law

2016
Hermann Koch

2015
Steve M. Mills

2014
Mark McGranaghan

2013
Mohindar S. Sachdev

2012
Daleep Mohla

2011
James W. Moore

2010
Richard DeBlasio

2009
James Thomas Carlo

2008
Roy Billinton

2007
Vic Hayes

2006
S. Mark Halpin

2005
Wallace S. Read

2004
Julian Forster

2003
Donald C. Loughry

2002
Ben C. Johnson

2001
Stanley Baron

2000
Hiroshi Yasuda

1999
Dennis Bodson

1998
William J. McNutt

1997
Donald N. Heirman
L. John Rankine

1996
Marco W. Migliaro

IEEE CHARLES PROTEUS STEINMETZ AWARD

Kenneth E. Martin

RECOGNITION

For leadership in and sustained contributions to standards for synchrophasor measurements and communications for power system monitoring, protection, and control

HIGHLIGHTS

At the forefront of developing synchrophasor measurement systems since their creation during the 1980s, Kenneth E. Martin has leveraged this experience to develop standards integral to the widespread use of this technology that is critical to the reliable operation of the electric grid. Synchrophasors provide a wide-area view of the power grid that increases visibility and improves situational awareness, allowing operators to see and resolve problems in real time.

Kenneth helped develop IEEE 1344™-1995, IEEE Standard for Synchrophasors for Power Systems. He then initiated IEEE C37.118™-2005, which developed methods to assure measurement compatibility and a communications protocol for wide-area systems. This standard serves as the basis for most synchrophasor measurements and system implementations worldwide. He continues leading synchrophasor standard development, most recently chairing the group developing IEEE P2664™, Draft Standard for Streaming Telemetry Transport Protocol, which supports data communication in larger systems.

An IEEE Life Fellow, Kenneth is a Senior Principal Engineer with the Electric Power Group, Pasadena, California, USA.

2022 IEEE SA Board of Governors

- Jame E. Matthews, IEEE SA President
- Yu Yuan , IEEE SA President Elect
- David Law, IEEE SA Standards Board (SASB) Chair
- Gary Hoffman, Past SASB Chair
- Don Wright, IEEE SA Treasurer
- Gary Stuebing, IEEE SA CAG Chair
- Konstantinos Karachalios, Secretary
- Todor Cooklev, Member-at-Large
- Stephen Dukes, Member-at-Large
- Abhay Karandikar, Member-at-Large
- Subhas Mondal, Member-at-Large
- Glenn Parsons, Member-at-Large
- Mehmet Ulema, Member-at-Large
- Walter Weigel, Member-at-Large
- George Zimmerman, Member-at-Large
- Ramesh Ramadoss, Member-at-Large (non-voting)
- Robby Simpson, Member-at-Large (non-voting)

2022 IEEE SA Awards and Recognition Committee

- Yatin Trivedi, Chair
- Gary Hoffman
- Andrew Myles
- Robby Robson
- George Zimmerman
- Victoria Kuperman-Super, Administrator

2022 IEEE SA Awards Ceremony Program and Brochure

- Julie Alessi
- Susan England-Lutz
- Victoria Kuperman-Super
- Mary Lynne Nielsen
- Dave Ringle

445 Hoes Lane, Piscataway, NJ 08854 USA
standards.ieee.org
Tel. +1 732-981-0060