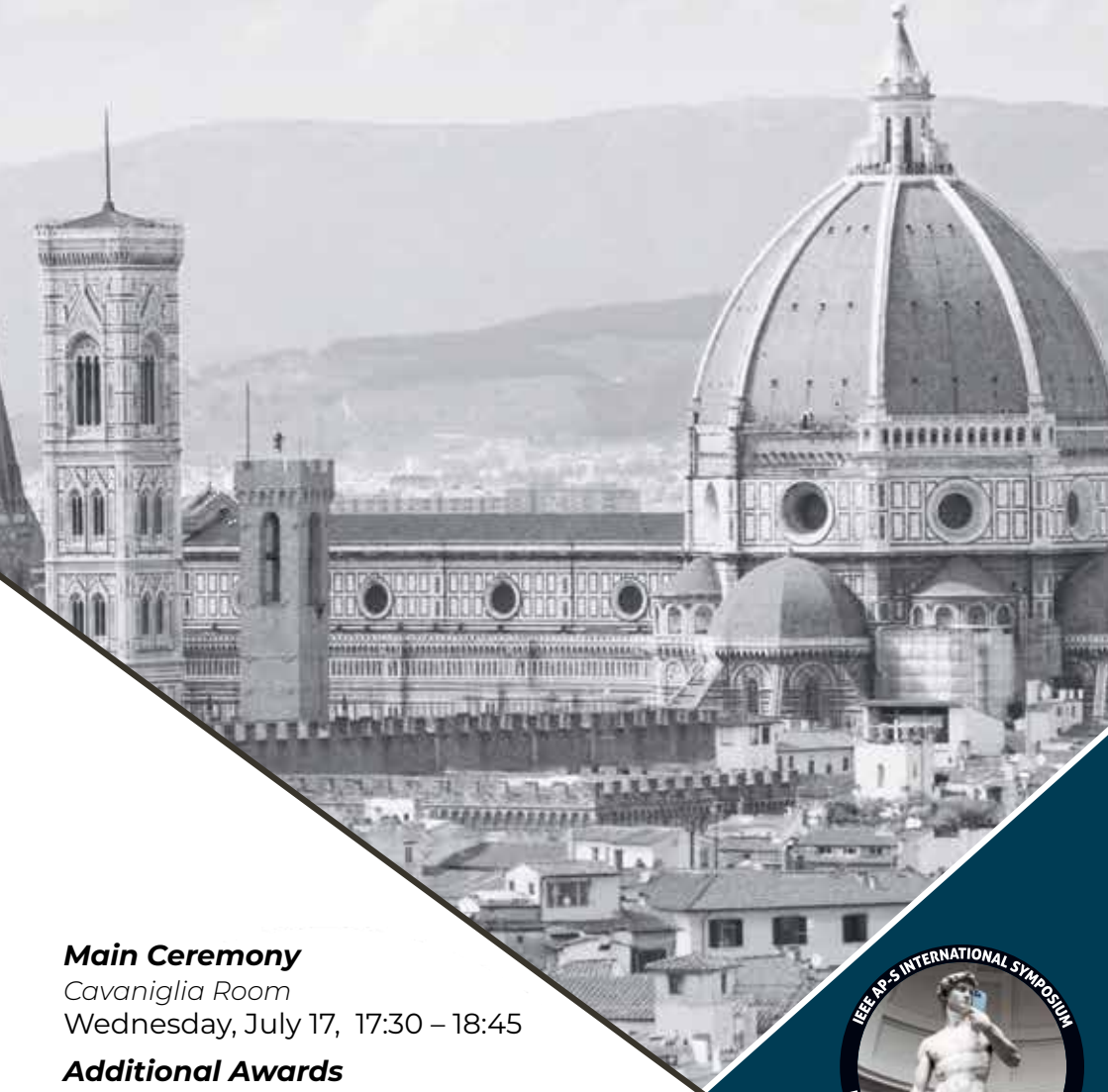


Main Ceremony

Cavaniglia Room

Wednesday, July 17, 17:30 – 18:45

Additional Awards

Spadolini - Demo Area

Tuesday, July 16, 13:00 – 13:30

Wednesday, July 17, 13:00 – 13:30

2024 AWARDS PRESENTATION

IEEE INTERNATIONAL SYMPOSIUM ON ANTENNAS AND PROPAGATION & URSI - USNC NATIONAL RADIO SCIENCE MEETING

Main Awards Ceremony

Wednesday, July 17, 17:30-18:45 Cavaniglia Room

Awards Presentation Introductions and Welcome

Branislav M. Notaroš, IEEE AP-S President

Gianluca Lazzi, IEEE AP-S Awards Committee Chair

2024 IEEE Electromagnetics Award

Presenters Thomas Coughlin, IEEE President and Branislav M. Notaroš, IEEE AP-S President

Prof. Kamal Sarabandi "For *contributions to electromagnetic sensing technology and metamaterials for antenna miniaturization."*

2023 IEEE Young Professional Hall of Fame Award

Presented by Thomas Coughlin, IEEE President

Accepted for AP-S by

Branislav M. Notaroš, IEEE AP-S President and

CJ Reddy, Chair, IEEE AP-S Young Professionals Committee

2024 IEEE AP-S Fellows Evaluated by AP-S

Presenter Gianluca Lazzi, IEEE AP-S Awards Committee Chair

James Breakall "For design of novel antennas for radar, communications, and iono spheric and radio-astronomy research."

Yu Jian Cheng "For contributions to substrate integrated millimeter-wave array antenna technology."

Gregory Durgin "For contributions to the theory of fading in multi-antenna RFID systems."

Giacomo Oliveri "For contributions to analytic design of antenna arrays and compressive sensing in electromagnetics."

Atif Shamim "For contributions in the field of antenna-on-chip and antenna-inpackage."

Mohammad Sharawi "For contributions to multiband, reconfigurable, and integrated active multiple-input and multiple-output antenna systems."

Hang Wong "For contributions to development of magneto-electric dipole and Lprobe feed for wideband and reconfigurable antennas."

2024 IEEE AP-S Fellows Elevated by Other Societies

Josep Miquel Jornet "For contributions in terahertz communication and nanonetworking."

Ji Che "For contributions to implantable medical device safety in MRI"

Premjeet Chahal "For contributions to additive manufacturing and materials characterization."

Kaixue Ma "For contributions to low-loss substrate integrated suspended line technology and reconfigurable millimeter-wave front-end integrated circuits."

Ho-jin Song "For contributions to wireless terahertz technology."

Thushara Abhayapala "For contribution to the theory of spherical harmonic-based spatial sound field recording, reproduction, and control."

Yue Gao "For contributions to sparse signal processing and smart antennas in cognitive radio and networks."

AP-S Field Awards

Presenter Gianluca Lazzi, IEEE AP-S Awards Committee Chair

2024 Distinguished Achievement Award

Dr. Stuart Long "For the introduction and development of the dielectric resonator antenna and the early development of the microstrip patch antenna."

2024 Chen-To Tai Distinguished Educator Award

Dr. Nader Engheta "For lifelong dedication to electromagnetic education and mentoring and for pioneering and transformative innovations in numerous areas in electromagnetics and optics."

2024 John Kraus Antenna Award

Dr. Yang Hao "For contributions to body-centric wireless communications and antenna innovations based on transformation optics and metamaterials."

2024 Donald G. Dudley Jr. Undergraduate Teaching Award

Dr. Thomas Edgar Roth "For excellence in promoting education and research at the intersection of electromagnetic and quantum information technologies among undergraduate students."

2024 Lot Shafai Mid-Career Distinguished Achievement Award

Dr. Leyre Azpilicueta "For contributions to radio wave electromagnetic propagation modeling through novel hybrid techniques and to the access of women to the field.

2024 Harrington-Mittra Award in Computational Electromagnetics

Dr. Douglas Werner "For innovative contributions to the development of computational electromagnetics and optimization techniques for the simulation and inverse-design of antennas, metamaterials, and optical devices."

2024 Outstanding Service Award

Presenter Gianluca Lazzi, IEEE AP-S Awards Committee Chair

Piergiorgio L.E. Uslenghi, Distinguished Professor Emeritus, University of Illinois, Chicago

"In recognition of his exemplary dedication, leadership, and continuous contributions to the Society, as the Founding Editor of the Antennas and Wireless Propagation Letters, Editor in Chief of the Transaction of Antennas and Propagation, President of the Society, and of his significant work on enhancing the relationship between AP-S and URSI."

AP-S Industry Awards

Presenter Gianluca Lazzi, IEEE AP-S Awards Committee Chair

2024 Distinguished Industry Leader Award

Dr. Sudhakar Rao "For distinguished industry leadership, pioneering contributions, and innovations to advanced antenna technologies for satellite, air, and ground communications."

2024 Industrial Innovation Award

Dr. Yihong Qi "For contributions to the Radiated Two Stage MIMO OTA measurement method."

2024 IEEE AP-S Ulrich L. Rohde Humanitarian Technical Field project Award

Presenter Jawad Y. Siddiqui, Chair, AP-S SIGHT Committee

G.S. Mani

This award is given to an AP-S funded humanitarian project which provides low cost solution for humanitarian technology and a clear path for low cost production so that technology can be available for mankind.

AP-S Paper Awards

Presenter Gianluca Lazzi, IEEE AP-S Awards Committee Chair

IEEE AP-S Sergei A. Schelkonuff Transactions Prize Paper Award

Said Mikki, "The Shannon Information Capacity of an Arbitrary Radiating Surface: An Electromagnetic Approach", IEEE Transactions on Antennas and Propagation, Vol. 71, No. 3, pp. 2556-2570, March 2023

IEEE AP-S Harold A. Wheeler Application Prize Paper Award

Thomas Jaschke and Arne F. Jacob, "A Dual-Polarized SIW Lens Antenna Array for Rx-/Tx-Integration at K/Ka-Band", IEEE Transactions on Antennas and Propagation, Vol. 71, No. 3, pp. 2443-2453, March 2023

IEEE AP-S R.W.P. King Award

Alexander Paulus and Thomas F. Eibert, "Fully Probe-Corrected Near-Field Far-Field Transformations With Unknown Probe Antennas", IEEE Transactions on Antennas and Propagation, Vol. 71, No. 7, pp. 5967-5980, July 2023

IEEE AP-S Piergiorgio L.E. Uslenghi Prize Paper Award

Modeste Bodehou, Gilles Monnoyer, Maxime Drouguet, Khaldoun Al Khalifeh, Luc Vandendorpe, and Christophe Craeye, "Metasurface Antennas for FMCW Radar", IEEE Antennas and Wireless Propagation Letters, Vol. 22, No. 5, pp. 1040-1044, May 2023

IEEE AP-S Edward E. Altshuler Prize Paper Award

Grigorii Ptitcyn, Mohammad Sajjad Mirmoosa, Amirhosein Sotoodehfar, and Sergei A. Tretyakov, "A Tutorial on the Basics of Time-Varying Electromagnetic Systems and Circuits: Historic overview and basic concepts of time-modulation", IEEE Antennas and Propagation Magazine, Vol. 65, No. 4, pp. 10-20, August 2023

Outgoing AP-S President, Committee Chairs, AdCom Members

2023 IEEE AP-S President: Stefano Maci

2024 Symposium General Chair and Co-Chairs: Agostino Monorchio, Chair; Roberto Graglia, Co-Chair; Giuliano Manara, Co-Chair

2024 Symposium Technical Program Co-Chairs: Francesco Andriulli, Asimina Kiourti, Andrew F. Peterson

Outgoing AdCom Members (term ending in 2023): Magda El-Shenawee, Mohamed Essaaidi, Koichi Ito (2019 AP-S President), Kwai-Man Luk

Awards Ceremony

Tuesday, July 16, 13:00-13:30 Spadolini - Demo Area

2024 IEEE AP-S Membership and Benefits Committee Travel Grants

Presenter George Shaker, Committee Chair

Deisy Formiga Mamedes, Federal Institute of Paraiba
Omran Abbas, University of British Columbia
Guillaume Ndjamba Nyami, Concordia University
Mohammed Farouk Nakmouche, École de technologie supérieure (ÉTS)
Joaquín Alejandro Sandoval Muñoz, Pontificia Universidad Católica de Valparaíso
Tianchen Shao, Tsinghua University
Asif Bilal, University of Cyprus
Christos Bilitos , University of Rennes
Yiwen Zhang, University of Paris Saclay
Deepthi Mariam John, Manipal Institute of Technology
Rakesh Prasad, Indian Institute of Technology Mandi
Akhilesh Kumar, Indian Institute of Technology Patna
Pooja Sharma, Motilal Nehru National Institute of Technology Allahabad
Satya Prakash, IIT Kharagpur
Renat Abdullin, Mediterranea University of Reggio Calabria
Leonardo Cardinali, Politecnico di Torino
Hibiki Shiiba, Kumamoto University
Ainaa Maisarah Shamsul Kamal, International Islamic University Malaysia
Curtis Casha, University of Malta
Yuqing Zhu, Chalmers University of Technology
Berk Bural, Hacettepe University
Mostafa Hamed Abdalla Elsayed, University of Glasgow
Prisila Ishabakaki, University of Glasgow
Samuel Quaresima, Northeastern University
Benjamin Davis, University of Notre Dame
André Conradie, Stellenbosch University
Sean Manas, Stellenbosch University
Youness Zaarour, University of Mohammed VI Polytechnic
Fatima Zahrae El Arroud, College for Sustainable Agriculture and Environmental Sciences, Mohammed VI Polytechnic University
Mohamed Nooh, Institute of Aviation Engineering and Technology

C. J. Reddy Travel Grants

Presenter CJ Reddy

Stefanos Bakirtzis (University of Cambridge)
Hui Chen (City University of Hong Kong)
Samuel Elkin (Purdue University)
Mingsai Huan (Northwestern Polytechnical University)
Patinavalasa Megh Sainadh (Indian Institute of Technology Indore)
Shang-Yi Sun (University of Technology Sydney)

TICRA Foundation Travel Grants

Presenter Jakob Rosenkrantz de Lasson

Suryarajitha Inapurapu
Yongzhong Li
Jeonghyo Lee
Daniela Marques Godinho
Cedric Münger
Lopamudra Mazumder
John Alejandro Rangel Retavisca
Shiwen Tang

Outgoing AP-S Volunteers Completing Their Service (Committee Members, Track Editors, Associate Editors)

IEEE Transactions on Antennas and Propagation (TAP) - Associate Editors: Marco Antoniades, Hakan Bagci, Shih-Yuan Chen, Yue Li, CJ Reddy, Francesca Vipiana, Rod Waterhouse

IEEE Antennas and Wireless Propagation Letters (AWPL) - Associate Editors: Akram Alomainy, , Yue Li, Sudhakar Rao, Chow-Yen-Desmond Sim, Josaphat Tetuko Sri Sumantyo, Alexander Yakovlev (Senior Associate Editor)

IEEE Journal of Electromagnetics, RF and Microwave in Medicine and Biology (JERM) – Associate Editors: Qammer Abbasi, Akram Alomainy, Christoph Baer, Konstanty Bialkowski, Pai-Yen Chen, Xudong Chen, Michal Cifra, Sandra Costanzo, Lorenzo Crocco, Qi Duan, Roberto Gomez-Garcia, Katia Grenier, Micaela Liberti, Jennifer L. Mueller, Konstantina S. Nikita, Milica Popovic, Paolo Ravazzani, Dominique Schreurs, Atif Shamim

IEEE Open Journal on Antennas and Propagation (OJAP) – Associate Editors: Jacob Adams, Felix Vega, Raed Shubair, Panagiotis Kosmas, C.J. Reddy

IEEE Journal on Multiscale and Multiphysics Computational Techniques (JMMCT): Hakan Bagci, Jiefu Chen, Chao-Fu Wang

IEEE Antennas and Propagation Magazine – Associate Editors: Matthys Botha, Meisong Tong, CJ Reddy

Awards Committee: Cynthia Furse (Chair)

Fellow Evaluation Committee: Douglas Werner (Chair), Jay Guo, Sadasiva Rao

Member and Geographic Activities Committee: Mohamed Essaaidi, Yang Hao, Ahmed Kishk, Claire Migliaccio, Kamal Sarabandi

Press Liaison Committee: Gary Brown

New Technology Directions Committee: Ozlem Kilic, Kunio Sakakibara

Technical Committee on Antenna Measurement: Debatosh Guha (Chair), John Estrada, Sungtek Kahng, Ying Liu, Puneet Mishra, Atif Shamim, Yang Yang, Xiu Yin Zhang

Standards Committee: Nick Buris, Dave Michelson

Distinguished Lecturer Program Committee: Kwai Man Luk (Chair), Hiroyuki Arai, Ajay Poddar, Rod Waterhouse

Young Professionals Committee: Ashwin Iyer

Chapter Activity Committee: Zhizhang David Chen, Edip Niver, Chinmoy Saha

Education Committee: Yaniv Brick, Raed Shubair, Jeff Ward, Jim West

Field Award Subcommittee: Sima Noghanian, Christophe Fumeaux, William Scanlon

Awards Ceremony

Wednesday, July 17, 13:00 – 13:30, Spadolini - Demo Area

2024 Mojgan Daneshmand Grant

Presenter Claire Migliaccio, AP-S Diversity, Equity and Inclusion Committee Chair

Hajar Abedi, University of Waterloo
Azadeh Ahmadihaji, Ecole supérieure de technologie Montréal
Elisa Augello, University of Waterloo
Baisakhi Bandyopadhyay, Indian Institute of Technology Kanpur
Secil F. Dogan, The Ohio State University
Rotem Gal-Katzir, University of Tel-Aviv
Martina Gugliermino, Politecnico di Torino
Hira Hameed, University of Glasgow
Myoungsun Kim, Pohang University of Science and Technology
Tianrui Qiao, Hong Kong University of Science and Technology
Suchitra Tiwari, Indian Institute of Technology Jammu
Jiexi Yin, Karlsruhe Institue of Technology

2024 IEEE AP-S Outstanding Chapter Awards

Presenter Ajay K. Poddar, AP-S Chapter Activities Committee Chair

1st Place: IEEE Pune AP/MTT/EMC Jt. Chapter
2nd Place: IEEE Hyderabad AP/MTT/EMC Jt. Chapter
3rd Place: IEEE Turkey AP/MTT/EMC/ED Jt. Chapter

2024 IEEE AP-S Outstanding Young Professional of the Year Award

Presenter C.J. Reddy, AP-S YP Committee Chair

Dr. Gangil Byun

Student Design Contest SDC Winners

Student Paper Competition SPC Winners

2024 IEEE Electromagnetics Award

Prof. Kamal Sarabandi "For *contributions to electromagnetic sensing technology and metamaterials for antenna miniaturization.*"

Kamal Sarabandi (S'87-M'90-SM'92-F'00-LF'21) is the Fawwaz T. Ulaby Distinguished University Professor of EECS and the Rufus S. Teesdale Endowed Professor of Engineering at The University of Michigan.

His research areas of interest include microwave and millimeter-wave radar remote sensing, Meta-materials, electromagnetic wave propagation, antenna miniaturization, and bio-electromagnetics. Professor Sarabandi has supervised 64 Ph.D. and numerous Masters students and postdoctoral fellows. He has published a text book, many book chapters, more than 345 papers in refereed journals, and more than 780 conference papers. He, together with his students, are recipients of 36 paper awards.

Dr. Sarabandi served as a member of NASA Advisory Council for two consecutive terms (2006-2010) and served as the President of the IEEE Geoscience and Remote Sensing Society (2015-2016).

He is the past Chair of Commission F of USNC/URSI and serving as member of the AdCom for the IEEE Antennas and Propagation Society. He led numerous NASA projects and served as a member of the Science Team for NASA SMAP mission.

He also led a major Center for Microelectronics and Sensors funded by the Army Research Laboratory (2008-2018) and is leading the Center of Excellence in Microwave Sensor Technology.

His contributions to the field of electromagnetics have been recognized by many awards including Humboldt Research Award, the IEEE GRSS Distinguished Achievement Award, the IEEE Judith A. Resnik award, the IEEE GRSS Education Award, NASA Group Achievement Award, the IEEE Electromagnetics Award, and many other awards from the University of Michigan. He is a Life-Fellow of the IEEE, a Fellow of the American Association for the Advancement of Science (AAAS), and a Fellow of the National Academy of Inventors. Professor Sarabandi is a member of the National Academy of Engineering and a recipient of the prestigious Ellis Island Medal of Honor.

2024 Distinguished Achievement Award

Dr. Stuart Long "For the introduction and development of the dielectric resonator antenna and the early development of the microstrip patch antenna."

Stuart A. Long completed his secondary education in Snyder, Texas. He was granted the B.A. (magna cum laude) and M.E.E. degrees in Electrical Engineering from Rice University, and the Ph.D. in Applied Physics from Harvard University. He was previously employed at General Dynamics and the Los Alamos Scientific Laboratories before joining the faculty at the University of Houston 50 years ago. There he has served as Chairman of the Department, Associate Dean of the College, Interim Dean of the Honors College, and Interim Vice President for Research. He presently is the Moores Professor of Electrical and Computer Engineering and Associate Dean of Undergraduate Research and the Honors College.

His research interests are in the broad area of applied electromagnetics and more specifically in microstrip and dielectric resonator antennas. Dr. Long also leads programs to bring girls to campus during the summer, allow high school teachers to be involved in research, involve undergraduates in research activities, place PhD students into local high school science classes, form communities for female engineering students, and aid in the retention of currently enrolled students.

Dr. Long served AP-S as AdCom member, President, General Chair of the 1983 Symposium in Houston, and Meetings Coordinator for 30 years. He also served on the IEEE Technical Activities Board, Publications Activities Board, Spectrum Editorial Board, IEEE Fellow Committee, and Audit Committee, and was elected to the Board of Directors of the IEEE as Director of Division IV.

At the University of Houston, Dr. Long was the recipient of the University Teaching Excellence Award, the Engineering Alumni Faculty Award, the University of Houston Alumni Outstanding Faculty Award, IEEE Region 5 Educator of the Year award, and received the top career award given by the College. He was named as the first recipient of the University of Houston Career Teaching Excellence Award, and received the Esther Farfel Award, the highest faculty award given at the University of Houston.

Dr. Long is a member of Phi Beta Kappa, Tau Beta Pi, and Commission B of URSI, and is a Life Fellow of the IEEE, and served as an AP-S Distinguished Lecturer. He previously was awarded the IEEE Millennium Medal, the IEEE Antennas and Propagation Society Outstanding Service Award, the IEEE John Kraus Antenna Award, and the IEEE Chen-To Tai Distinguished Educator Award.

2024 Chen-To Tai Distinguished Educator Award

Dr. Nader Engheta "For lifelong dedication to electromagnetic education and mentoring and for pioneering and transformative innovations in numerous areas in electromagnetics and optics."

Nader Engheta is the H. Nedwill Kamsey Professor at the University of Pennsylvania in Philadelphia, with affiliations in the Departments of Electrical and Systems Engineering, Physics and Astronomy, Bioengineering, and Materials Science and Engineering. He received his BS degree from the University of Tehran, and his MS and Ph.D. degrees from Caltech. His current research activities span a broad range of areas including optics, metamaterials, electrodynamics, microwaves, photonics, nano-optics, graphene photonics, imaging and sensing inspired by eyes of animal species, microwave and optical antennas, and physics and engineering of fields and waves.

He has received several awards for his research including the 2023 Benjamin Franklin Medal in Electrical Engineering from the Franklin Institute, Elected to the American Academy of Arts and Sciences, Elected to Academia Europaea (The Academy of Europe) as a foreign member, the 2023 Caltech Distinguished Alumni Award, the 2020 Isaac Newton Medal and Prize from the Institute of Physics (UK), the 2020 Max Born Award from the OPTICA (formerly Optical Society), the 2019 Ellis Island Medal of Honor, the 2018 IEEE Pioneer Award in Nanotechnology, the 2022 Hermann Anton Haus Lecture at MIT, the 2015 SPIE Gold Medal, the 2014 Balthasar van der Pol Gold Medal from the International Union of Radio Science (URSI), the 2017 William Streifer Scientific Achievement Award, the Canadian Academy of Engineering as an International Fellow, the Fellow of US National Academy of Inventors (NAI), the IEEE Electromagnetics Award, the Vannevar Bush Faculty Fellowship Award from DoD, the Wheatstone Lecture in King's College London, the IEEE Antennas and Propagation Society Distinguished Achievement Award, 2006 Scientific American Magazine 50 Leaders in Science and Technology, and the Guggenheim Fellowship.

He is a Fellow of nine international scientific and technical organizations, i.e., IEEE, OPTICA, American Physical Society (APS), Materials Research Society (MRS), International Society for Optics and Photonics (SPIE), URSI, American Association for the Advancement of Science (AAAS), Institute of Physics (IOP-UK) and US National Academy of Inventors (NAI). He has received the honorary doctoral degrees from the Aalto University in Finland in 2016, the University of Stuttgart, Germany in 2016, and Ukraine's National Technical University Kharkov Polytechnic Institute in 2017.

2024 John Kraus Antenna Award

Dr. Yang Hao "For contributions to body-centric wireless communications and antenna innovations based on transformation optics and metamaterials."

Yang Hao received the Ph.D. degree in computational electromagnetics from the Centre for Communications Research, University of Bristol, U.K., in 1998.

He was a Postdoctoral Research Fellow with the School of Electronic, Electrical and Computer Engineering, University of Birmingham, U.K.

He is currently a QinetiQ/Royal Academy of Engineering Research Chair at Queen Mary University of London, U.K. His work has been recognised through his books "Antennas and Radio Propagation for Body-Centric Wireless Communications" and "FDTD Modeling of Metamaterials: Theory and Applications," (Artech House, USA) and highly cited papers published in leading journals. These research results have been taken up by industry in the U.K., and overseas.

He has supervised more than 70 Ph.D. students and postdoctoral, who are now employed by the industry and universities worldwide, some of whom have set up their own spinout companies.

He was the Editor-in-Chief of IEEE Antennas and Wireless Propagation Letter and he is an elected Fellow of the Royal Academy of Engineering, IEEE, IET and ERA Foundation.

Prof. Hao won many accolades, including the prestigious AF Harvey Research Prize in 2015, the BAE Chairman's Silver Award in 2014, and the Royal Society Wolfson Research Merit Award in 2013. In 2024, he won the EurAAP Antenna Award and the Fred W. Ellersick Prize from the IEEE Communications Society.

2024 Donald G. Dudley Jr. Undergraduate Teaching Award

Dr. Thomas Edgar Roth "For excellence in promoting education and research at the intersection of electromagnetic and quantum information technologies among undergraduate students."

Thomas E. Roth is an Assistant Professor in the Elmore Family School of Electrical and Computer Engineering. He received all his degrees in electrical and computer engineering, with the B.S. degrees from Missouri University of Science and Technology and the M.S. and Ph.D degrees from the University of Illinois at Urbana-Champaign. Prior to joining Purdue, he was a Senior Member of the Technical Staff at Sandia National Laboratories in the Radar Electromagnetics & Sensor Technologies department where he was named a 2019 Up & Coming Innovator for his technical and programmatic leadership in the design of radar antennas and highly-reconfigurable reflectarray antennas. He is the recipient of Young Scientist Awards at the 2023 Photonics & Electromagnetics Research Symposium and the URSI International Symposium on Electromagnetic Theory 2023 (1st place), a recipient of the 2023 IEEE Ulrich L. Rohde Innovative Conference Paper Award on Computational Techniques in Electromagnetics, as well as the 2023 Ruth and Joel Spira Outstanding Teacher Award at Purdue University. His research focuses on multiscale and multiphysics computational electromagnetics techniques, particularly for analyzing and designing emerging classical electromagnetic technologies and quantum information processing devices.

2024 Lot Shafai Mid-Career Distinguished Achievement Award

Dr. Leyre Azpilicueta "For contributions to radio wave electromagnetic propagation modeling through novel hybrid techniques and to the access of women to the field.

Leyre Azpilicueta (Senior Member, IEEE) received her Telecommunications Engineering Degree (2009), her Master's Degree of Communications (2011) and her Ph.D. Degree in Telecommunication Technologies (2015), at the Public University of Navarre (UPNA), in Spain. In 2010 she worked in the R&D department of RFID Osés as radio engineer. From 2015 to 2022, she was an Associate Professor and Researcher at Tecnologico de Monterrey, Campus Monterrey, Mexico. Currently, she is a Ramon y Cajal Fellow (Researcher & Professor) at UPNA, in Spain. She has over 250 contributions in relevant journals and conference publications. Her research interests are on radio propagation, mobile radio systems, wireless sensor networks, ray tracing, and channel modeling. She was the IEEE Communications Society Monterrey Chapter Chair (2020-2022), and Faculty Advisor of the IEEE-HKN Lambda-Rho Chapter (2020-2022). She is currently the Vice-Chair of the IEEE ComSoc RCC Special Interest Group on Propagation Channels for 5G and Beyond. She is Associate Editor of IEEE Sensors Letters Journal (2020-present), IEEE Journal on Multiscale and Multiphysics Computational Techniques (2022-present), Computer Communications Journal (2021-present) and International Journal of Electronics and Communications (2018-date). She has co-authored the textbook Radio Wave propagation in Vehicular Environments (2020), from The Institution of Engineering and Technology.

She has received numerous awards over the past few years, including the 2014 IEEE APS Doctoral Research Award, the Young Professors and Researchers Santander Universities 2014 Mobility Award, the Best PhD in 2016 awarded from Colegio Oficial de Ingenieros de Telecomunicación (COIT), the 2018 IEEE N2Women: Rising Stars in Computer Networking and Communications Award, the IEEE APS Raj Mittra Travel Grant 2020, the Distinguished Professor Award 2020 and 2021, and the IEEE APS Mojgan Daneshmand Grant 2021. She also co-authored papers that received Best Paper Awards at conferences, including ECSA 2014, the IISA 2015, ISSI 2019, and EAI IndustrialIoT 2020.

2024 Harrington-Mittra Award in Computational Electromagnetics

Dr. Douglas Werner "For innovative contributions to the development of computational electromagnetics and optimization techniques for the simulation and inverse-design of antennas, metamaterials, and optical devices."

Douglas H. Werner received the B.S., M.S., and Ph.D. degrees in electrical engineering and the M.A. degree in mathematics from the Pennsylvania State University (Penn State), University Park, in 1983, 1985, 1989, and 1986, respectively.

He holds the John L. and Genevieve H. McCain Chair Professorship in the Penn State Department of Electrical Engineering. He is the director of the Computational Electromagnetics and Antennas Research Lab as well as a faculty member of the Materials Research Institute at Penn State.

He holds 20 patents, has published over 1000 technical papers and proceedings articles, 8 books and 30 book chapters. He is a Fellow of nine professional societies including IEEE, IET, NAI, OPTICA, SPIE, ACES, AAIA, AAAS, and the PIER Electromagnetics Academy. He also serves as the Editor for the IEEE Press Series on Electromagnetic Wave Theory & Applications.

Prof. Werner has received numerous awards and recognitions including the IEEE Antennas and Propagation Society Edward E. Altshuler Prize Paper Award and the Harold A. Wheeler Applications Prize Paper Award in 2011 and 2014 respectively. He also received the 2015 ACES Technical Achievement Award, the 2019 ACES Computational Electromagnetics Award, the IEEE Antennas and Propagation Society 2019 Chen-To Tai Distinguished Educator Award and the 2023 John Kraus Antenna Award.

2024 Outstanding Service Award

Piergiorgio L.E. Uslenghi, "In recognition of his exemplary dedication, leadership, and continuous contributions to the Society, as the Founding Editor of the Antennas and Wireless Propagation Letters, Editor in Chief of the Transaction of Antennas and Propagation, President of the Society, and of his significant work on enhancing the relationship between AP-S and URSI."

Piergiorgio L. E. (George) Uslenghi is a Distinguished Professor Emeritus in the University of Illinois Chicago.

He has published extensively on electromagnetics, optics, acoustics, microwaves, scattering theory, complex electronic materials, and applied mathematics.

He is a Member of the Phi Beta Kappa and Sigma Xi Honorary Societies, a Fellow of URSI, a Life Fellow of IEEE, a recipient of the IEEE Third Millennium Medal, a Honorary Member of USNC-URSI, a Member of the Academy of Sciences of Turin, a Past President of the IEEE Antennas and Propagation Society and of the International Union of Radio Science (URSI), a University of Illinois Scholar, and a Distinguished Alumnus of the Polytechnic of Turin.

He has been EIC of the IEEE Transactions on Antennas and Propagation, and the Founding Editor of the IEEE Antennas and Wireless Propagation Letters and of the URSI Radio Science Letters.

2024 Distinguished Industry Leader Award

Dr. Sudhakar Rao "For distinguished industry leadership, pioneering contributions, and innovations to advanced antenna technologies for satellite, air, and ground communications."

Dr. Sudhakar Rao is the President & CEO of RaoS Consultants LLC providing technical consultancy to various companies in USA, Canada, Europe, and India. Dr. Rao retired from Northrop Grumman Space Systems (NGSS) in 2022 where he worked as the Senior Technical Fellow and provided leadership to all divisions of Northrop Grumman in the areas of antennas and payloads for space, air, and ground communication programs. Over the 48 years of his professional career, he worked at NGSS, Lockheed Martin, Boeing Satellite Systems, Spar Aerospace Ltd (now MDA), LRDE Bangalore & ECIL Hyderabad and led the development of advanced antenna systems for 90 satellite and 10 vehicular & ground programs. Dr. Rao received B. Tech from REC Warangal, M. Tech from IIT Kharagpur, Ph. D from IIT Madras and did post-doctoral fellowship from Univ. of Trondheim, Norway and University of Manitoba, Canada. His work on the development of radiation templates for complex satellite antenna patterns for interference analysis was adopted by the ITU/CCIR in 1992 as the world-wide standard for satellite manufacturers and operators. Dr. Rao authored over 250 technical papers and was awarded 58 patents (52 US & 6 European) and 5 trade secrets. His fundamental work on the design of multiple beam antennas in 1999 has been used by satellite industry world-wide. He authored and co-edited three textbook volumes on "Handbook of Reflector Antennas and Feed Systems" that were published in June 2013 by Artech House.

Dr. Rao is an IEEE Life Fellow, a Fellow of IETE, and a Life Fellow of WAMS Society. He received several awards including the IEEE Benjamin Franklin Key Award in 2006, Delaware Valley Engineer of the Year in 2008, Asian American Engineer of the year award in 2008, IEEE Judith Resnik Technical Field Award in 2009 for pioneering work in aerospace engineering, Boeing's Special Invention awards in 2001 & 2002, Lockheed Martin's President Award in 2005, 2007 & 2008, 2009, IEEE Region 6 Outstanding Engineer Award for 2017 and the 2017 Northrop Grumman's President Award. He received the Distinguished Alumni Professional Achievement Award from NIT Warangal in 2016, IETE's Prof. S.N. Mitra Memorial Award in 2016, and the 2020 IETE's Biman Behari Sen Memorial Award. Dr. Rao served as the Distinguished Lecturer and as an AdCom member for the IEEE APS. He was the founding chair for the IEEE APS "Industry Initiatives Committee" during 2011-2015, IEEE APS Fellow Evaluation Committee member during 2015-2017, founding editor of the IEEE Antennas & Propagation Magazine's "Antenna Applications Corner", Associate Editor for the IEEE TAP, and Associate Editor of IEEE AWPL. He is the founding executive committee member of the Wireless, Antenna, & Microwave Symposium (WAMS) conferences in India. Dr. Rao served as the IEEE Fellow Committee member for 2020 & 2021, 2023 and is now for 2024. He instituted IETE – Dr. Sudhakar Rao Award in 2020 to recognize and honor outstanding antenna engineers and established best outgoing male & female student awards at Raghu Engineering College, Visakhapatnam. Dr. Rao is the Distinguished Visiting Professor at IIIT DM Kancheepuram, India and is also serving as the member of School Research Board of Vignan University, Guntur, India. He received the lifetime achievement award in 2024 from the IEEE Vizag Bay Section for his contributions to antenna industry and his services to WAMS.

2024 Industrial Innovation Award

Dr. Yihong Qi "For contributions to the Radiated Two Stage MIMO OTA measurement method."

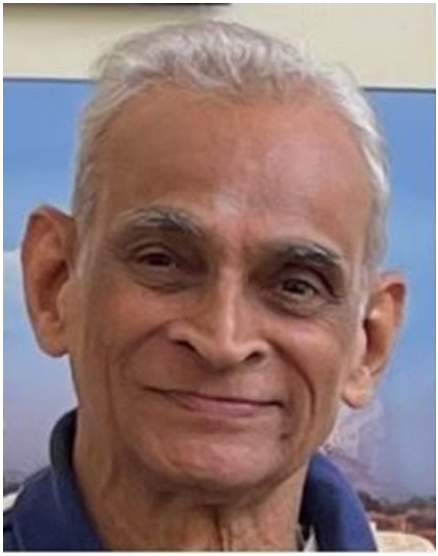
Dr. Yihong Qi is an engineer, scientist, inventor, and entrepreneur. He founded Pontosense Inc., Mercku Inc., LinkE Inc., and General Test Systems. Additionally, he serves as an adjunct professor at the EMC Laboratory, Missouri University of Science and Technology, USA, and Western University, Canada. From 1995 to 2010, he worked at Research in Motion (Blackberry) in Waterloo, ON, Canada, where he was the Director of Advanced Electromagnetic Research.

Dr. Qi holds over 500 granted and pending patents and has authored more than 150 scientific papers. His multi-band smart antenna technology, which positions the antenna at the bottom of mobile terminals, significantly reduces radio-wave radiation to the human head. This innovation has protected billions of smartphone users from potential electromagnetic hazards and addressed hearing aid compatibility issues, benefiting over 20 million users who rely on hearing aids. His antenna design has become a mainstream solution for smartphones. Furthermore, his Radiated Two Stage MIMO throughput OTA measurement standards-related inventions have streamlined the certification process and reduced costs for 5G, intelligent connected vehicles, and the Internet of Things. He also invented the O-shaped board-to-board spring connector, which is widely used in the electronics industry with over 50 billion units produced. His high-speed connector invention showcases leading performance for next-generation high-speed interconnects. His wireless intelligent sensing innovation is the first mmWave wireless sensor used for child presence detection and driver monitoring in the automotive industry, and it is also applied in elderly care, health, and medical fields, earning multiple international awards.

Dr. Qi is a distinguished lecturer for the IEEE Antenna and Propagation Society and the IEEE EMC Society. He has received the IEEE EMC Society Technical Achievement Award and his inventions have garnered multiple accolades, including three CES Innovation Awards, the CES Network Product of the Year Award, the CES Wellness Product of the Year Award, and three Red Dot Awards among other awards. He contributes to the 3GPP and CTIA international standards. Dr. Qi is a Fellow of the IEEE, the Canadian Academy of Engineering, and the National Academy of Inventors.

2024 IEEE AP-S Ulrich L. Rohde Humanitarian Technical Field Project Award

This award is given to an AP-S funded humanitarian project which provides low cost solution for humanitarian technology and a clear path for low cost production so that technology can be available for mankind.



Prof. Dr. G. S. Mani is currently Chair of IEEE Pune JCAME (joint Chapter AP/MTT/EMC). He is a Former chair of IEEE, Pune section, and Former Dean and Director at Defence Institute of Advanced Technology (DIAT), DRDO, Pune, India.

He is a member of the AP-S COPE and is involved in programs like EU-REKA which aims to raise the national literacy bar at high school level cutting across urban and rural boundaries.

He is a recipient of the 2023 IEEE Ulrich L. Rohde Humanitarian Technical Field Project Award.

2023 AP-S President

Stefano MACI (F'04) earned his Laurea Degree cum Laude from the University of Florence in 1987 and since 97 he held the position of Professor at the University of Siena. Currently, he leads a group of 15 researchers at his university.

In 2004 He founded the European School of Antennas (ESoA) in 2004, a postgraduate school that currently offers 34 courses on Antennas, Propagation, Electromagnetic Theory, and Computational Electromagnetics. With 150 teachers from 15 countries, he has been the Director of ESoA since its inception.

Professor Maci's research interests encompass high-frequency methods, computational electromagnetics, large, phased arrays, planar antennas, reflector antennas and feeds, metamaterials, and metasurfaces.

Professor Maci is Fellow of IEEE; he received the EurAAP Award in 2014, the IEEE Schelkunoff Transaction Prize in 2016, the Chen-To Tai Distinguished Educator award in 2016, and the URSI Dellinger Gold Medal in 2020.

He has been a former associate editor of IEEE AP-Transaction, former Chair of the Award Committee of IEEE AP-S, former member of the Board of Directors of the European Association on Antennas and Propagation (EurAAP) and former Distinguished Lecturer of the IEEE AP-S and EuRAAP. He served as the President of the IEEE Antennas and Propagation Society for the year 2023 and as the Chair of the Field Award Committee of IEEE AP-S in 2024.

In the last decade, he has served as a member of the Technical Advisory Board for 10 international conferences and he has been invited 40 times as a keynote speaker in international conferences. He has been TPC Chair of the METAMATERIAL 2020 conference and general Chairperson of European Conference on Antennas and Propagation in EuCAP 2023.

Since 2010, he has been the principal investigator of 40 research projects, 15 of them financed by the European Space Agency and 6 of them by the European Union. He co-founded two Spin-off Companies.

His research activity is reflected in his publication record comprising 200 papers in international journals, 14 book chapters, and about 600 papers in proceedings of international conferences.

2024 IEEE AP-S
Outstanding Young Professional of the Year Award

The IEEE Antennas and Propagation Society (AP-S) Young Professional of the Year Award is to recognize one Young Professional (YP) member of the IEEE Antennas and Propagation Society for significant service to AP Society during the one-year term as IEEE AP-S Young Ambassador.

This year AP-S is pleased to announce Dr. Gangil Byun of Ulsan National Institute of Science and Technology (UNIST), South Korea as the 2023 IEEE Antennas and Propagation Society Young Professional of the Year Awardee!! Dr. Gangil Byun received his B.S. and M.S. degrees in Electronic and Electrical Engineering from Hongik University, Seoul, South Korea, in 2010 and 2012, respectively. He completed his Ph.D. degree in Electronics and Computer Engineering from Hanyang University, Seoul, South Korea, in 2015.

Following his graduation, Dr. Byun joined Hongik University as a Research Professor where he conducted active research for two years. In February 2018, he joined the faculty of Ulsan National Institute of Science and Technology (UNIST), Ulsan, South Korea, where he is currently an Associate Professor in the Department of Electrical Engineering (EE). Since 2022, he has also assumed the role of Director of the Core RF/Power Component Research Center for Low-Orbit Next-Generation Satellites (LONGS).

Dr. Byun's primary research focuses on millimeter-wave antennas and metasurfaces with a strong emphasis on advancing adaptive beamforming techniques for diverse applications, including 5G/6G communication, satellite technology, defense systems, and radars. Dr. Byun's distinguished contributions have been pivotal in advancing overall beamforming performance, achieved through a unique integration of antenna engineering and signal processing insights. His current research pursuits extend to display-integrated antennas, antenna-in-package (AiP), and reconfigurable intelligent surface (RIS) to derive innovations for future wireless communication systems.

Student Paper Competition Awards Finalists

Hanhong Liu, Beihang University, China; Ge Li, Beijing Institute of Space Long March Vehicle, China; Shunchuan Yang, Beihang University, China, "MO-A4.2A.2: Toward the Development of a 3D SBP-SAT FDTD Subgridding and Practical Applications"

Christos Exadaktylos, Muhammad Hamza, Constantinos Zekios, Stavros Georgakopoulos, Florida International University, United States, "MO-A2.4P.3: A Dual-Polarized Ultra-Wideband Fully Inverted-L Element (FILE) Array"

Luke Kipfer, Marinos Vouvakis, University of Massachusetts Amherst, United States; Rick Kindt, Naval Research Laboratory, United States, "MO-A2.4P.2: Wideband Multichannel I/Q Generation for Circularly Polarized Arrays"

Yufei Fan, University of Electronic Science and Technology of China, China; Yuandan Dong, Uni. of Electronic Science & Technology of China, China, "MO-A2.5P.2: 3-D Printed Wideband Multi-beam Parallel-plate Waveguide Folded Geodesic Lens Antenna"

Matthew Kunkle, University of Missouri-Kansas City, United States; Mohamed Hamdalla, The Missouri Institute for Defense & Energy, United States; Ahmed Hassan, University of Missouri-Kansas City, United States, "TU-A4.1A.10: Efficient Singularity Expansion Method Implementation Using Characteristic Mode Analysis"

Nicoletta Panunzio, Gaetano Marrocco, University of Rome Tor Vergata, Italy, "WEP-A6.2.10: In-nostrils Antennas for Temperature-based Breath Monitoring"

Jason M. Merlo, Jeffrey A. Nanzer, Michigan State University, United States, "WE-A6.1P.1: Distributed Interferometric Radar for Radial and Angular Velocity Measurement"

Donggeun An, Wonbin Hong, Pohang University of Science and Technology, Korea (South), "WE-A3.1P.2: Autonomous, Enviornment-Adapative Reconfigurable Intelligent Surfaces with Built-in Direction-of-Arrival Estimation Function"

Rayan Al Sayed Ali, Joseph Costantine, Youssef Tawk, Rouwaida Kanj, Fatima Asadallah, Joanna Ghaddar, Assaad Eid, Amercian University of Beirut, Lebanon; Nassim Fares, Dania Chelala, St Joseph University, Lebanon, "THP-A6.1.2: Instantaneous Creatinine Testing in Urine Using a Modified Bifilar Helix Antenna"

Fanchao Zeng, Can Ding, Y. Jay Guo, University of Technology Sydney (UTS), Australia, "FR-A2.2A.5: A Polarization-Mixed Antenna Array with Wide-Range Continuous Beamwidth Control"

Xing-Yu Cheng, Can Ding, University of Technology Sydney, Australia; Richard W Ziolkowski, University of Arizona, United States, "FR-A1.2A.2: Cross-Band De-Scattering and Decoupling for Dual-Band Shared-Aperture Dielectric Resonator Antennas"

Amit Shaham, Ariel Epstein, Technion - Israel Institute of Technology, Israel, "FR-A3.1P.6: Perfect All-Angle Spatial Differentiators via Asymmetric Grazing-Angle Huygens' Metasurfaces"

Student Design Contest Awards Finalists

Universidad Politécnica Salesiana of Cuenca, Ecuador

Team name: Akuntsu Sense

Mentor: Luis F. Guerrero-Vásquez

Team members: Nathalia A. Chacón-Reino (undergraduate), María B. Íñiguez- Añazco (undergraduate), Ronny J. Morocho-Ponce (undergraduate), Josue I. Samaniego-Rui (graduate), and Andrés D. Auz-Cabrera (undergraduate)

University of Illinois at Chicago, USA

Team name: Andrew Lab-UIC-NTU

Mentor: Pai-Yen Chen

Team members: Josh Czorniak (undergraduate), Ming-Yan Liu (undergraduate), Yi-Chen Liu (undergraduate), Nga Vu (graduate), and Trung Dung Ha (graduate).

Southeast University, China

Team Name: Awards-Harvester

Mentor: Yan Zhang

Team members: Wenjing Ge (undergraduate), Hongbo Wang (undergraduate), Liangfa Liao (graduate), and Runze Huang (graduate).

Bogazici University, Turkey

Team Name: BOUNtenna

Mentor: Sema Dumanli Oktar

Team members: Ferhat Burak Ozcan (undergraduate), Anil Tulu (undergraduate), Ada Yildirim (undergraduate), Ahmet Bilir (graduate), and Mehmet E. Korkmaz (graduate)

Lund University, Sweden

Team Name: The PICC Group

Mentor: Johan Lundgren

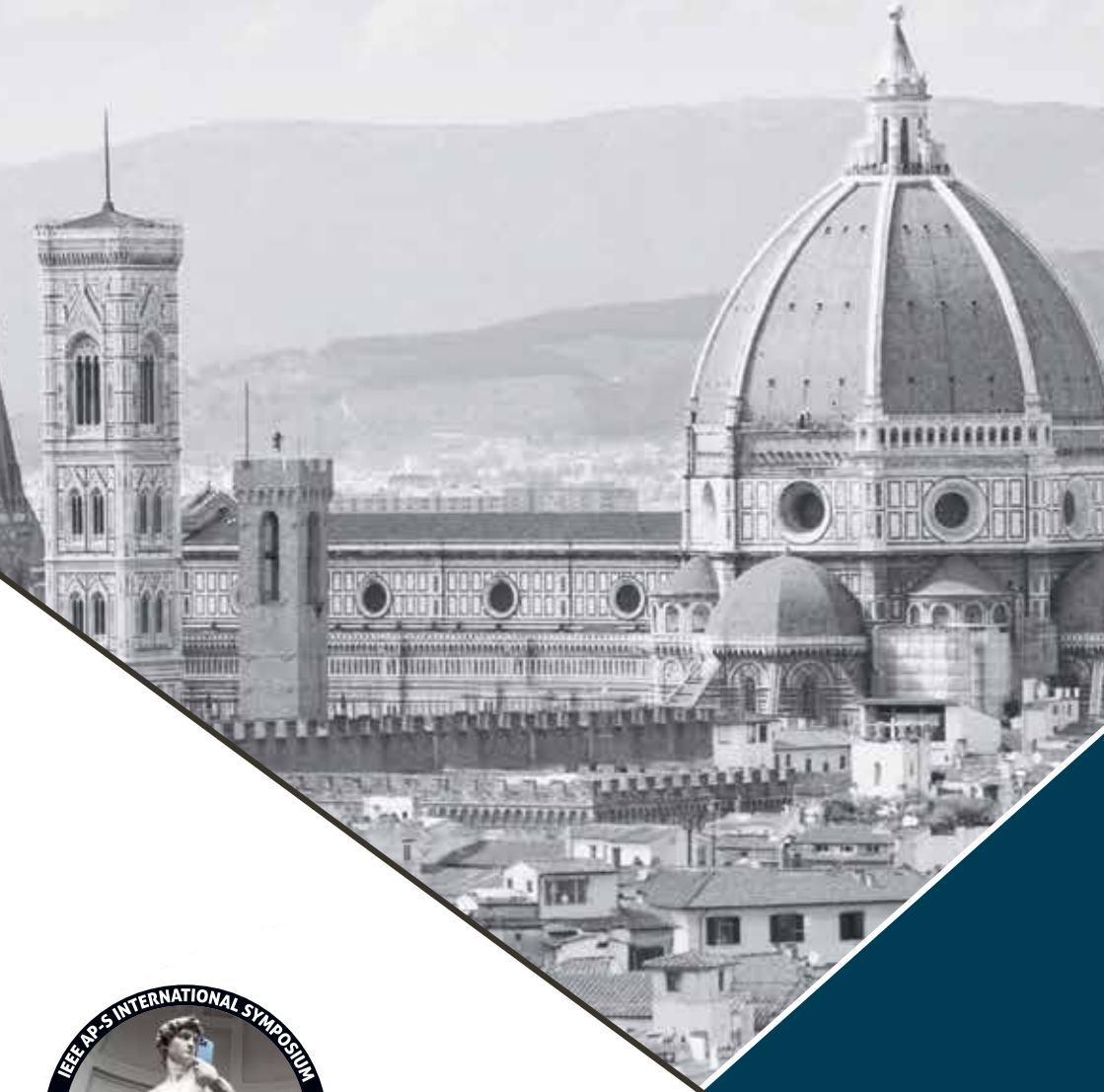
Team members: Teo Bergkvist (undergraduate), Otto Edgren (undergraduate), Oscar Gren (undergraduate), Mans Jacobsson (undergraduate), and Christian Nelson (graduate)

American University of Beirut, Lebanon

Team Name: SignScribe

Mentor: Joseph Costantine

Team members: Georgio Abou Jaoude (undergraduate), Pia Saade (undergraduate), Jana Salameh (undergraduate), Rami Mezher (undergraduate), and Zayna Attoun (graduate).



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