

2017 Newly Elevated Fellows

Raviraj Adve
University of Toronto
Toronto, ON, Canada

for development of signal processing techniques for airborne radar

Sos Agaian
University of Texas at San Antonio
San Antonio, TX, USA

for contributions to biologically-inspired visual data processing systems

Alexei Ashikhmin
Bell Labs - Alcatel-Lucent
New Providence, NJ, USA

for contributions to information theory and communication theory

Nadarajah Asokan
Aalto University
Aalto, Finland

for contributions to system security and privacy

Todd Austin
University of Michigan
Ann Arbor, MI, USA

for contributions to simulation techniques and resilient system design in computer architecture

John Ballato
Clemson University
Anderson, SC, USA

for contributions to optical fibers and optoelectronic materials

2017 Newly Elevated Fellows

Hugh Barnaby
Arizona State University
Tempe, AZ, USA

for research of radiation effects in bipolar junction transistors

Janet Barth
NASA Goddard Spaceflight Center
Greenbelt, MD, USA

for leadership in spacecraft reliability and electronic systems

Christopher Barty
Lawrence Livermore Nat'l Laboratory
Livermore, CA, USA

for contributions to ultrahigh intensity lasers and advancement of X-ray and gamma-ray science

Nader Behdad
University of Wisconsin, Madison
Madison, WI, USA

for contributions to sub-wavelength electromagnetic periodic structures

Calin Belta
Boston University
Boston, MA, USA

for contributions to automated control synthesis and robot motion planning and control

Valeria Bertacco
University of Michigan
Ann Arbor, MI, USA

for contributions to computer-aided verification and reliable system design

Kankar Bhattacharya
University of Waterloo
Waterloo, ON, Canada

for contributions to electricity markets and reactive power ancillary services

2017 Newly Elevated Fellows

Petronel Bigioi
FotoNation
Galway, Ireland

for leadership in advancing digital imaging technology for handheld consumer devices

Sebastien Bigo
Alcatel-Lucent Bell Labs
Nozay, France

for contributions to optical transmission systems and networks

Filiberto Bilotti
Roma Tre University
Rome, Italy

for contributions to metamaterials for electromagnetic and antenna applications

Terrance Boulton
University of Colorado Colorado Springs
Colorado Springs, CO, USA

for contributions in biometrics and computer vision

Robert Boyd
University of Ottawa
Ottawa, ON, Canada

for contributions to the fields of nonlinear optics and photonics

Richard Buehrer
Virginia Tech
Blacksburg, VA, USA

for contributions to wideband signal processing in communications and geolocation

Linda Bushnell
University of Washington
Seattle, WA, USA

for contributions to networked control systems

2017 Newly Elevated Fellows

Alper Buyuktosunoglu
IBM T.J. Watson Research Center
Yorktown Heights, NY, USA

for contributions to adaptive micro-architectures and robust power management

Raymond Byrne
Sandia National Laboratories
Albuquerque, NM, USA

for contributions to miniature robotics and grid integration of energy storage

Zi-Xing Cai
Central South University
Hunan, China

for contributions to evolutionary optimization and intelligent robotics

Andrea Caiti
University of Pisa- Largo
Pisa, Italy

for contributions to geo-acoustic inversion and autonomous underwater vehicles

Yu Cao
Arizona State University
Tempe, AZ, USA

for development of predictive technology models for reliable circuit and system integration

Franck Cappello
Argonne National Laboratory
Lemont, IL, USA

for contributions to high-performance computing, fault tolerance, and grid-based computing

Michael Carey
University of California, Irvine
Irvine, CA, USA

for contributions to design and engineering of high-performance and concurrent database systems

2017 Newly Elevated Fellows

Luca Carloni
Columbia University
New York, NY, USA

for contributions to system-on-chip design automation and latency-insensitive design

Jose Carmena
University of California, Berkeley
Berkeley, CA, USA

for contributions to the neural basis of motor skill learning and neuroprosthetic systems

Edward Chang
Stanford Info Lab-Stanford University
Stanford, CA, USA

for contributions to scalable machine learning

Edoardo Charbon
Delft University of Technology
Delft, Netherlands

for contributions to solid-state single photon avalanche detectors and their applications in imaging

Lap-Pui Chau
Nanyang Technological University
Singapore, Singapore

for contributions to fast computation algorithms for visual signal processing

Yan Chen
Northwestern University
Evanston, IL, USA

for contributions to design, measurement, and security of networking systems

Gordon Cheng
Technische Universitat Munchen
Munich, Germany

for contributions in humanoid robotics systems and neurorobotics

2017 Newly Elevated Fellows

Graziano Chesi
The University of Hong Kong
Hong Kong, China

for contributions to control of nonlinear and multi-dimensional systems

Wei-Ting Chien
SMIC-Semiconductor Mfg. Int'l Corp.
Shanghai, China

for leadership in reliability management

Kiyoung Choi
Seoul National University
Seoul, Korea

for contribution to low-power, real-time, and reconfigurable systems

Israel Cidon
Technion – Israel Institute of Technology
Haifa, Israel

for contributions to high-speed packet networks, network-on-chip and wide area file systems

Douglas Cochran
Arizona State University
Tempe, AZ, USA

for contributions to multi-channel coherence in radar, sonar, and spectrum sensing

Christopher Cole
Finisar Corporation
Sunnyvale, CA, USA

for contributions to 10G, 40G, and 100G Optical Ethernet and OTN interfaces

Gerald Cooray
Karolinska University Hospital, Stockholm
Stockholm, Sweden

for contributions to understanding of the physics of lightning and lightning protection

2017 Newly Elevated Fellows

Sorin Cotofana
Delft University of Technology
Delft, Netherlands

for contributions to nanocomputing architectures and paradigms

Robert Cunningham
MIT Lincoln Laboratory
Lexington, MA, USA

for leadership in computer security

Huaiyu Dai
North Carolina State University
Raleigh, NC, USA

for contributions to MIMO communications and wireless security

Ricardo De Queiroz
Universidade de Brasilia
Brasilia, Brazil

for contributions to image and video signal enhancement and compression

William Deal
Northrop Grumman Corporation
Redondo Beach, CA, USA

for contributions to solid state submillimeter wave and Terahertz amplifiers

Jing Deng
University of North Carolina, Greensboro
Greensboro, NC, USA

for development and optimization of wireless security and networking protocols

Tamal Dey
Ohio State University
Columbus, OH, USA

for contributions to geometric computing

2017 Newly Elevated Fellows

Jose Dias
Instituto Superior Tecnico
Lisbon, Portugal

for contributions to imaging inverse problems in remote sensing

William Dickerson
Arbiter Systems, Inc.
Paso Robles, CA, USA

for leadership in precision clock and synchrophasor technologies

Danny Dolev
Hebrew University of Jerusalem
Jerusalem, Israel

for development of consistent, robust, and efficient distributed computing and storage

Xinzhou Dong
Tsinghua University, China
Beijing, China

for contributions to traveling wave-based transmission line protection and fault location

Zhaoyang Dong
The University of Sydney
Sydney, NSW, Australia

for contributions to development of computational methods for power system stability and planning

Dov Dori
Massachusetts Institute of Technology
Cambridge, MA, USA

for contributions to model-based systems engineering and document analysis recognition

Frederick Douglis
Dell EMC Corporation
Princeton, NJ, USA

for contributions to computer systems resource utilization and efficiency

2017 Newly Elevated Fellows

Pier Luigi Dragotti
Imperial College
London, UK

for contributions to sparse signal representation and sampling theory

Falko Dressler
University of Paderborn
Paderborn, Germany

for contributions to adaptive and self-organizing communication protocols in sensor and vehicular networks

Guang Duan
Harbin Institute of Technology
Harbin, Heilongjiang, China

for contributions to parametric control system design and applications

Sandhya Dwarkadas
University of Rochester
Rochester, NY, USA

for contributions to shared memory and reconfigurability

Janaka Ekanayake
University of Peradeniya
Peradeniya, Sri Lanka

for contributions to education in renewable energy integration and smart grid

Eylem Ekici
The Ohio State University
Columbus, OH, USA

for contributions to algorithms, protocols, and architectures of multi-hop wireless networks

Terry Ericsen
Ericson Innovations LLC
Annapolis, MD, USA

for leadership in power electronics

2017 Newly Elevated Fellows

Pablo Estevez
University of Chile
Santiago, Chile

for contributions to feature selection and visualization of large data sets

Maria Pia Fanti
Politecnico di Bari
Bari, Italy

for contributions to modeling and control of discrete event systems

Joseph E. Ford
University of California, San Diego
La Jolla, CA, USA

for contributions to free space optical imaging and communication technologies

Gianfranco Fornaro
Istituto per Il Rilevamento Elethomagnetico Dell'Ambiente
Naples, Italy

for contributions to SAR processing in differential interferometry and tomography

James Fowler
Mississippi State University
Mississippi State, MS, USA

for contributions to lossy source coding and dimensionality reduction of multidimensional data

Edward Fox
Virginia Tech
Blacksburg, VA, USA

for leadership in digital libraries and information retrieval

Michael Gard
The Charles Machine Works
Perry, OK, USA

for contributions to instrumentation-and-measurement technology for petroleum exploration, computed tomography, and underground construction

2017 Newly Elevated Fellows

Minos Garofalakis
Technical University of Crete
Chania, Greece

for contributions to data streaming analytics

Michael Gastpar
Ecole Polytechnique Federale de Lausanne
Lausanne, Switzerland

for contributions to network information theory

Alessandro Giua
Universita Di Cagliari
Cagliari, Italy

for contributions to discrete event and hybrid systems

Debatosh Guha
Indian Institute of Technology, Kharagpur
Kharagpur, West Bengal, India

for contributions to microstrip and wideband dielectric resonator antennas

Bhuvaneswari Gurumoorthy
Indian Institute of Technology Delhi
New Delhi, India

for contributions to design and development of enhanced power quality converters

Soonhoi Ha
Seoul National University
Seoul, Korea

for contributions to hardware/software codesign

Saman Halgamuge
University of Melbourne
Victoria, Australia

for contributions to computational intelligence in bioinformatics and mechatronics

2017 Newly Elevated Fellows

Peter Hancock
University of Central Florida
Orlando, FL, USA

for contributions to adaptive human-systems engineering

Uwe Hanebeck
Karlsruhe Institute of Technology, Germany
Karlsruhe, Germany

for contributions to nonlinear estimation and control

Stephen Hanly
Macquarie University
Sydney, NSW, Australia

for contributions to capacity analysis and optimization of wireless communication networks

Lennart Harnfors
ABB Corporate Research
Vasteras, Sweden

for contributions to control and dynamic analysis of power electronic systems

Hossam Hassanein
Queens University
Kingston, ON, Canada

for contributions to protocols, architectures and analysis of multi-hop wireless networks

Masahito Hayashi
Nagoya University
Nagoya, Japan

for contributions to Shannon theory, information-theoretic security, and quantum information theory

Payam Heydari
University of California, Irvine
Irvine, CA, USA

for contributions to silicon-based millimeter-wave integrated circuits and systems

2017 Newly Elevated Fellows

Laura Heyderman
Paul Scherrer Institute
Villigen, Switzerland

for contributions to nanoimprint lithography and nanostructured magnetic systems and devices

Hideto Hidaka
Renesas Electronics Corporation
Tokyo, Japan

for leadership in high-density memory technologies for automotive applications

Christopher Hierold
Swiss Federal Institute of Technology
Zurich, Switzerland

for contributions to microelectromechanical sensors and microthermoelectric energy harvesting

Akimasa Hirata
Nagoya Institute of Technology
Nagoya, Japan

for contributions to safety assessment and standardization of human exposure to electromagnetic fields

Julia Hirschberg
Columbia University
New York, NY, USA

for contributions to text-to-speech synthesis and spoken language understanding

Wing C. Daniel Ho
City University of Hong Kong
Kowloon, Hong Kong

for contributions to stability and control for stochastic systems

YoSung Ho
Gwangju Institute of Science & Technology
Gwangju, Korea

for contribution to video coding and 3D image processing

2017 Newly Elevated Fellows

Yiguang Hong
Chinese Academy of Science, Beijing
Beijing, China

for contributions to nonsmooth control and distributed multi-agent control

Hugues Hoppe
Microsoft Research
Redmond, WA, USA

for contributions to surface modeling and large-scale image processing

Mahbub Hoque
Communications-Electronics Research Development & Engineering Center
Bel Air, MD, USA

for leadership in developing innovative antennas and advanced tactical communication technologies

Jiang Hsieh
GE Medical Systems
Milwaukee, WI, USA

for contributions to X-ray computed tomography for clinical applications

Ru Huang
Peking University
Beijing, China

for contributions to multi-gate silicon nanowire transistor technology

Tian-Wei Huang
National Taiwan University
Taipei, Taiwan

for contributions to design and development of millimeter-wave CMOS RFICs

Zhenyu Huang
Pacific Northwest National Lab
Richland, WA, USA

for contributions to dynamic analysis and high performance computing in power systems

2017 Newly Elevated Fellows

Laszlo Huber
Delta Products Corporation
Research Triangle Park, NC, USA

for contributions to ac-dc power converters for portable electronics equipment

Pablo Iglesias
Johns Hopkins University
Baltimore, MD, USA

for contributions to control theory and systems biology

Michael Isnardi
Sarnoff Corporation
Princeton, NJ, USA

for contributions to compliance testing and vision-based video compression technologies

Kenji Itoh
Kanazawa Institute of Technology
Nonoichi, Ishikawa, Japan

for contributions to microwave harmonic mixers and applications to mobile terminal devices

Chia-Hong Jan
Intel Corporation
Portland, OR, USA

for leadership in developing low power logic technologies for System-on-Chip

Juri Jatskevich
University of British Columbia
Vancouver, BC, Canada

for contributions to modeling of electric machines and switching converters

Deog-Kyoon Jeong
Seoul National University
Seoul, Korea

for development of Digital Video Interface and High Definition Multimedia Interface standards

2017 Newly Elevated Fellows

Quanxi Jia
Los Alamos National Laboratory
Los Alamos, NM, USA

for contributions to coated superconductors and metal-oxide thin films for electronic applications

Hongrui Jiang
University of Wisconsin, Madison
Madison, WI, USA

for contributions to materials and micro-scale optical tools for medical imaging

Jin Jiang
University of Western Ontario
London, ON, Canada

for contributions to methodology, design, and evaluation of engineering systems safety

Ronghong Jin
Shanghai Jiao Tong University
Shanghai, China

for development of high efficiency planar antenna arrays and miniaturized antennas for wireless systems

Yucheun Jou
MediaTek Inc.
San Jose, CA, USA

for leadership in digital cellular systems and smart mobile devices

Paul Juodawlkis
MIT Lincoln Laboratory
Lexington, MA, USA

for contributions to optically sampled converters and waveguide amplifiers

Kenichi Kagoshima
Ibaraki University
Ibaraki Prefecture, Japan

for contributions to antennas for satellite communication and mobile wireless access systems

2017 Newly Elevated Fellows

Chongqing Kang
Tsinghua University
Beijing, China

for contributions to power system operation and planning in uncertain environments

Mark David Kankam
NASA Glenn Research Center
Cleveland, OH, USA

for contributions to space and terrestrial power systems control

Hironori Kasahara
Waseda University
Tokyo, Japan

for contributions to multicore architectures and power reducing parallelizing compilers

Jordan Katine
Hitachi Gst Research
San Jose, CA, USA

for contributions to nanoscale magnetic device design, fabrication, and characterization

Tatsuya Kawahara
Kyoto University
Kyoto, Japan

for contributions to speech recognition and understanding

Amir Khandani
University of Waterloo
Waterloo, ON, Canada

for contributions to resource allocation and interference management in network information theory

Richard King
Arizona State University
Tempe, AZ, USA

for contributions to high-performance space and terrestrial photovoltaics technology

2017 Newly Elevated Fellows

Hulya Kirkici
Auburn University
Auburn, AL, USA

for contributions to high frequency, high field dielectric breakdown and electrical insulation for space and aerospace power systems

Powsiri Klinkhachorn
West Virginia University
Morgantown, WV, USA

for contributions to engineering education through international technical competitions

Takao Kobayashi
Tokyo Institute of Technology
Yokohama, Japan

for contributions to expressive speech synthesis based on a statistical parametric approach

Steven Koester
University of Minnesota
Minneapolis, MN, USA

for contributions to group-IV electronic and photonic devices

Agnieszka Konczykowska
Alcatel-Lucent Bell Labs, Thales Research
Palaiseau Cedex, France

for contributions to development of very high-speed circuits

Witold Krzymien
University of Alberta
Edmonton, AB, Canada

for contributions to radio resource management for cellular systems and networks

James Kwok
Hong Kong University of Science & Technology
Clearwater Bay, Hong Kong

for contributions to computational algorithms for kernel methods

2017 Newly Elevated Fellows

K. Kyriakopoulos
National Technical University of Athens
Athens, Greece

for contributions to robot motion planning and control of multi-robot systems

James Lambert
University of Virginia
Charlottesville, VA, USA

for contributions to risk analysis and systems engineering

Alvin Lebeck
Duke University
Durham, NC, USA

for contributions to memory hierarchies and energy-efficient and parallel computing

Gwo-Bin Lee
National Tsing Hua University
Hsinchu, Taiwan

for contributions to micro- and nano-fluidic technologies for biomedical applications

Hsien-Hsin Lee
Taiwan Semiconductor Manufacturing Company Ltd.
Hsinchu, Taiwan

for contributions to 3D integrated circuits and computer architecture

Kuen-Jong Lee
National Cheng-Kung University
Tainan, Taiwan

for contributions to low-cost testing of digital VLSI circuits

Ning-Cheng Lee
Indium Corp. of America
Clinton, NY, USA

for leadership in Surface Mount Technology and interconnect materials

2017 Newly Elevated Fellows

Sang Bin Lee
Korea University
Seoul, Korea

for contributions to off-line testing and on-line condition monitoring for ac electric machines

Bengt Lennartson
Chalmers University of Technology
Gothenburg, Sweden

for contributions to hybrid and discrete event systems for automation and sustainable production

Jose Leon
Universidad de Sevilla
Seville, Spain

for contributions to high-power electronic converters

Fangxing Li
University of Tennessee
Knoxville, TN, USA

for contributions to locational marginal price calculation

Hang Li
Huawei Technologies
Sha Tin, Hong Kong

for contributions to machine learning for information retrieval and natural language processing

Jingshan Li
University of Wisconsin, Madison
Madison, WI, USA

for contributions to manufacturing system automation

Li Li
Tsinghua University
Beijing, China

for contributions to intelligent transportation systems and vehicles

2017 Newly Elevated Fellows

Xin Li
Carnegie Mellon University
Pittsburgh, PA, USA

for contributions to modeling, analysis, and optimization of variability of integrated circuits and systems

Xin Li
West Virginia University
Morgantown, WV, USA

for contributions to image coding, restoration, and interpolation

Xiuling Li
University of Illinois
Champaign, IL, USA

for contributions to semiconductor nanomaterials for electronic and photonic applications

Yuanqing Li
South China University of Technology
Guangzhou, China

for contributions to brain signal analysis and brain computer interfaces

Qilian Liang
University of Texas, Arlington
Arlington, TX, USA

for contributions to interval type-2 fuzzy logic systems

Donald Lie
Texas Tech University
Lubbock, TX, USA

for contributions to high linearity and high efficiency silicon RF power amplifiers for broadband wireless applications

Teng-Joon Lim
National University of Singapore
Singapore, Singapore

for contributions to statistical signal processing in wireless communications

2017 Newly Elevated Fellows

Faa-Jeng Lin
National Central University
Taoyuan City, Taiwan

for contributions to intelligent control systems for motor drives and motion control

Phone Lin
National Taiwan University
Taipei, Taiwan

for contributions to resource management and service development for mobile networks

Xiaodong Lin
University of Ontario Institute of Technology- Canada
Waterloo, ON, Canada

for contributions in secure and privacy-preserving vehicular communications

Xiaojun Lin
Purdue University
West Lafayette, IN, USA

for contributions to scheduling and control of wireless networks

Frank Liu
IBM Research - Austin
Austin, TX, USA

for contributions to design for manufacturability of VLSI circuits

Jiangchuan Liu
Simon Fraser University
Burnaby, BC, Canada

for contributions to multimedia communications and content distribution over the Internet

Tieyan Liu
Microsoft Research Asia
Beijing, China

for contributions to machine learning for web search and online advertising

2017 Newly Elevated Fellows

Wentai Liu
University of California, Los Angeles
Los Angeles, CA, USA

for contributions to electronically-aided neural prosthetic devices

Xiang Liu
Huawei USA
Bridgewater, NJ, USA

for contributions to broadband optical fiber communication systems and networks

Yong Liu
New York University
Brooklyn, NY, USA

for contributions to multimedia networking

Gabriel Loh
Advanced Micro Devices, Inc.
Bellevue, WA, USA

for contributions to high-performance die-stacked computer architectures

David Lowther
McGill University
Montreal, QC, Canada

for contributions to, and industrial applications of computer aided design in electromagnetics

David Luebke
NVIDIA Corporation
Charlottesville, VA, USA

for contributions to GPU computing and computer graphics

Robert Lutwak
DARPA- Defense Advanced Research Projects Agency
Arlington, VA, USA

for technical leadership in research, development and commercialization of miniature atomic frequency standards and clocks

2017 Newly Elevated Fellows

Cyril Luxey
IUT Nice Côte d'Azur
Nice, France

for the development of small antennas, multi-antenna system integration, and high performance mm-wave systems

Joseph Lyles
Oak Ridge National Labs
Oak Ridge, TN, USA

for contributions in local network technology, Internet measurement, and research cyberinfrastructure

Wing-Kin Ma
The Chinese University of Hong Kong
Sha Tin, Hong Kong

for contributions to optimization in signal processing and communications

Enrico Magli
Politecnico di Torino
Milano, Italy

for contributions to compression and communication of remotely sensed imagery

Robert Mahony
The Australian National University
Canberra, ACT, Australia

for contributions to control aspects of aerial robotics

Sara Majetich
Carnegie Mellon University
Pittsburgh, PA, USA

for contributions to understanding of magnetic nanoparticles

Lorenzo Marconi
Dei-University of Bologna
Bologna, Italy

for contributions to feedback design of nonlinear systems and unmanned aerial vehicles

2017 Newly Elevated Fellows

Marta Martinez-Vazquez
IMST GmbH
Kamp-Lintfort, Germany

for leadership in integrated signal-aware technologies for antennas and global navigation satellite system arrays

Theresa Mayer
Virginia Tech
Blacksburg, VA, USA

for contributions to nanomaterials integration and directed assembly

Thierry Meynard
Centre National de la Recherche Scientifique
Toulouse, France

for contributions to multilevel power converters

Maurizio Migliaccio
Università di Napoli Parthenope
Naples, Italy

for contributions to marine and maritime polarimetric synthetic aperture radar

Jose del R Millan
Ecole Polytechnique Federale de Lausanne
Geneva, Switzerland

for contributions to brain-controlled robots

Stephen Milton
Colorado State University
Fort Collins, CO, USA

for contributions to free electron lasers

Pitu Mirchandani
Arizona State University
Tempe, AZ, USA

for contributions to stochastic dynamic networked systems in intelligent transportation and production systems

2017 Newly Elevated Fellows

Aleksandra Mojsilovic
IBM T.J.Watson Research Center
Yorktown Heights, NY, USA

for contributions to signal processing for image analysis, data mining, and business analytics

JeanMichel Muller
Ecole Normale Supérieure de Lyon
Lyon, France

for contributions to theory and applications of computer arithmetic

Srikantan Nagarajan
Biomagnetic Imaging Lab
San Francisco, CA, USA

for contributions to neural engineering and biomagnetic brain imaging

Junichi Nakamura
Brillnics Japan Inc.
Tokyo, Japan

for leadership in CMOS image sensors

Arumugam Nallanathan
Kings College London
London, UK

for contributions to cooperative communications and cognitive radio networks

Shu Namiki
Association for Iron & Steel Technology
Tsukuba, Ibaraki, Japan

for contributions to optical amplification

Panos Nasiopoulos
University of British Columbia
Vancouver, BC, Canada

for leadership in DVD authoring and digital multimedia technologies

2017 Newly Elevated Fellows

Eduardo Nebot
University of Sydney
Sydney, NSW, Australia

for contributions to robotics and applications in vehicle navigation and mining

Borivoje Nikolic
University of California, Berkeley
Berkeley, CA, USA

for contributions to energy-efficient design of digital and mixed-signal circuits

Brett Ninness
University of Newcastle
Newcastle, NSW, Australia

for contributions to computational methods in system identification

Akihiro Nitayama
Tohoku University
Sendai, Japan

for leadership in 3-dimensional NAND Flash memory technology development

Dusit Niyato
Nanyang Technological University
Singapore, Singapore

for contributions to resource allocation in cognitive radio and cellular wireless networks

Daniel Oates
MIT Lincoln Laboratory
Lexington, MA, USA

for contributions to high-temperature superconductors and applications to RF receiver technology

Bryan Oliver
Sandia National Laboratories
Albuquerque, NM, USA

for contributions to the theory and simulation of intense particle beams and plasmas

2017 Newly Elevated Fellows

Nuria Oliver
Telefonica I&D
Barcelona, Spain

for contributions in probabilistic multi-modal models of human behavior and development of intelligent and interactive systems

Giuseppe Oriolo
Univ di Roma La Sapienza
Roma, Italy

for contributions to motion planning and control methods in complex robotic systems

Rafail Ostrovsky
University of California, Los Angeles
Los Angeles, CA, USA

for contributions to cryptography

Aydogan Ozcan
University of California, Los Angeles
Los Angeles, CA, USA

for contributions to biophotonics, computational imaging, and sensing for telemedicine and global health

Phillip Pace
Naval Postgraduate School
Monterey, CA, USA

for leadership in radar signal processing, receiver design, and direction finding architectures

Kallianpur Padiyar
Indian Institute of Science, Bangalore
Bangalore, India

for contributions to education in power systems and application of power electronics

Tomas Palacios
Massachusetts Institute of Technology
Cambridge, MA, USA

for contributions to gallium nitride electron devices and two-dimensional materials

2017 Newly Elevated Fellows

Robert Palmer
University of Oklahoma
Norman, OK, USA

for contributions to atmospheric and meteorological radar science

Haesun Park
Georgia Institute of Technology
Atlanta, GA, USA

for contributions to large-scale data and visual analytics

Jung-Min Park
Virginia Tech
Blacksburg, VA, USA

for contributions to dynamic spectrum sharing, cognitive radio networks, and security issues

Lorenzo Pavesi
University of Trento
Trento, Italy

for contributions to silicon photonics

Li-Shiuan Peh
Massachusetts Institute of Technology
Cambridge, MA, USA

for contributions to the architecture and design automation of networks-on-chip

Shaomin Peng
Harman International
Stamford, CT, USA

for contributions to scalable video decoding methods in MPEG2 standard

Salvatore Pennisi
University of Catania
Catania, Italy

for contributions to multistage CMOS operational amplifiers

2017 Newly Elevated Fellows

Eric Perfecto
GlobalFoundries
Hopewell Junction, NY, USA

for the development of Pb-free, flip chip solder interconnect and advancements to multi-level Cu-polyimide packages

Dimitrios Peroulis
Purdue University
West Lafayette, IN, USA

for contributions to MEMS-based tunable filters

Kevin Peterson
P2S Engineering Inc.
Long Beach, CA, USA

for leadership in global standardization of commercial shore-to-ship power systems

Kristin Pettersen
Norwegian University of Science & Technology
Trondheim, Norway

for contributions to control of marine vessels and snake robots

Josep Pou
University of New South Wales
Sydney, Australia

for contributions to multilevel converters and renewable energy conversion

Lili Qiu
University of Texas
Austin, TX, USA

for contributions to wireless network management

Vesna Radisic
Northrop Grumman Corporation
Manhattan Beach, CA, USA

for contributions to millimeter- and submillimeter-wave sources, amplifiers, and monolithic integrated circuits

2017 Newly Elevated Fellows

Khwaja Rahman
General Motors LLC
Detroit, MI, USA

for contributions to permanent magnet electric machines for electrified vehicles

Bhiksha Raj
Carnegie Mellon University
Pittsburgh, PA, USA

for contributions to speech recognition

Bhuvana Ramabhadran
IBM Research Center
Mount Kisco, NY, USA

for contributions to speech recognition and language processing

Ravi Ramamoorthi
University of California, San Diego
La Jolla, CA, USA

for contributions to foundations of computer graphics and computer vision

Yun-Jiang Rao
University of Electronic Science & Technology of China
Chengdu, Sichuan, China

for contributions to optical fiber sensors and applications

Ramgopal Raovalipe
Indian Institute of Technology, Powai
Powai, Mumbai, India

for contributions to CMOS System-on-Chip technologies

William Regli
Drexel University
Philadelphia, PA, USA

for contributions to 3D search, design repositories and intelligent manufacturing

2017 Newly Elevated Fellows

Reza Rejaie
University of Oregon
Eugene, OR, USA

for contributions to multimedia and peer-to-peer networking, and Internet measurement

Walden Rhines
Mentor Graphics Corporation
Wilsonville, OR, USA

for leadership and technology innovation in integrated circuit design and automation

Charles Rhoads
Raytheon Company
McKinney, TX, USA

for leadership in low cost and high performance array antenna technologies

Michael Rice
Brigham Young University
Provo, UT, USA

for contributions to communication waveforms, detection algorithms, and channel models for aeronautical telemetry

Gael Richard
TELECOM ParisTech
Paris, France

for contributions to analysis, indexing and decomposition of audio and music signals

Frank Robey
MIT Lincoln Laboratory
Lexington, MA, USA

for leadership in development of advanced radar systems

Gregg Rothermel
University of Nebraska-Lincoln
Lincoln, NE, USA

for contributions to software testing and end-user software engineering

2017 Newly Elevated Fellows

Carlo Samori
Politecnico di Milano
Milano, Italy

for contributions to design of integrated Voltage Controlled Oscillators and Phase-Locked Loops

Seb Savory
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for contributions to digital coherent transceivers for optical fiber communication

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for contributions to networked and multi-agent control systems

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for contributions to large-scale object recognition, human detection and pose estimation

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for contributions to optofluidics and integrated photonics

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for contributions to compute architectures

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for contributions to computer vision, image retrieval, and gesture analysis

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for leadership in content-based processing and retrieval of multimedia information

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for contributions to 3D frequency selective structures and slot antennas

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for contributions to modeling and design of VLSI interconnects

Yang Shi
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for contributions to networked and distributed control systems

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for development of reliable power converters for industrial and renewable energy applications

Youngsoo Shin
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for contributions to design tools for low power, high speed VLSI circuits and systems

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for contributions to multimedia systems and network measurements

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for contributions to polarization phenomena and non-linear effects in fiber-optic communications

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for contributions to energy-efficient computer architectures

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for leadership and contributions to power engineering education

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for contributions to scheduling and resource allocation in wireless networks

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for contributions to technologies and standardization in power system protection

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for contributions to dominance-based rough set theory, robust ordinal regression and preference learning

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for contributions to optical micro-electro-mechanical devices and systems for sensing, communications and displays

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for leadership in developing operational methods for power grid interconnection in India

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for leadership in developing computational tools for healthcare enterprises

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for contributions to Brillouin-based fiber-optic sensors

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for contributions to fuzzy sets, decision under uncertainty, and data privacy

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for contributions in intelligent adaptive learning control for industrial systems and machinery

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for contributions to measurement and modeling of wireless propagation channels

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for advances in VHF- and UHF-band synthetic aperture radar

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for contributions to orthogonal frequency division multiplexing

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for contributions to the development and commercial adoption of SPICE circuit simulation

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for contributions to Internet of Things enabling technologies

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for contributions to circuits and microsystems for medical applications

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for contributions to the design, development, and realization of retinal prostheses

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for contributions to architectural and compilation techniques to meet embedded system constraints

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for contributions to motion analysis and pattern discovery in computer vision

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for contribution to control of electrical drives and power electronic converters

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for contributions to theory and design of asynchronous circuits

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for contributions to subspace learning and visual classification

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for contributions to piezoelectric and ferroelectric materials for high-performance electromechanical transducers

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for contributions to knowledge discovery and data mining

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for contributions to evolutionary computation and its applications

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for contributions to multi-objective evolutionary computation methodologies

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for contributions to video coding and communications