

2015 Newly Elevated Fellows

David Abe
U.S. Naval Research Laboratory
Washington, DC, USA

for leadership and contributions to the development of high power microwave and millimeter wave vacuum electronic devices

Vivek Agarwal
Indian Institute of Technology-Bombay
Mumbai, India

for contributions to topologies and control schemes for solar photovoltaic energy conversion and power quality enhancement

Héctor Altuve Ferrer
Schweitzer Engineering Laboratories, Inc.
Monterrey, Mexico

for contributions to power line and transformer protection

Matthew Andrews
Alcatel-Lucent Bell Labs
Murray Hill, NJ, USA

for contributions to network design and wireless resource allocation

David Angeli
Imperial College London
London, UK

for contributions to nonlinear control theory

Jean Armstrong
Monash University
Clayton, Australia

for contributions to the theory and application of orthogonal frequency division multiplexing in wireless and optical communications

2015 Newly Elevated Fellows

David August
Princeton University
Princeton, NJ, USA

for contributions to compilers and architectures for multicore and parallel processing systems

Christopher Auth
Intel Corporation
Hillsboro, OR, USA

for contributions to strained silicon transistor technology

Randy Avent
North Carolina State University
Raleigh, NC, USA

for leadership in automatic target recognition technology

Anastasios Bakirtzis
Aristotle University of Thessaloniki
Thessaloniki, Greece

for contributions to optimization of power systems operation and scheduling

Gerhard Bauch
Hamburg University of Technology
Hamburg, Germany

for contributions to iterative processing in multiple-input multiple-output systems

Jason Baumgartner
IBM Corporation
Austin, TX, USA

for contributions to formal hardware verification its and application

2015 Newly Elevated Fellows

Randal Beard
Brigham Young University
Provo, UT, USA

for contributions to the theory and practice of guidance, control, and team coordination of unmanned aerial vehicles

Wiren Becker
IBM Corporation
Poughkeepsie, NY, USA

for contributions to power distribution and signal integrity in high-speed interconnects for computing systems

Kristine Bell
Metron, Inc.
Reston, VA, USA

for contributions to statistical signal processing with radar and sonar applications

Ewert Bengtsson
Uppsala University
Uppsala, Sweden

for contributions to quantitative microscopy and biomedical image analysis

Charanjit Singh Bhatia
National Univeristy of Singapore
Singapore, Singapore

for contributions to magnetic head-media interfaces and tribology

Ricardo Bianchini
Rutgers University &
Microsoft Research
Bellevue, WA, USA

for contributions to server and data center energy management

2015 Newly Elevated Fellows

Marcela Bilek
University of Sydney
Sydney, Australia

for contributions to the science and application of plasma processes for materials modification and synthesis

Kenneth Birman
Cornell University
Ithaca, NY, USA

for leadership in distributed computing and management of distributed systems

Daniel Bliss
Arizona State University
Tempe, AZ, USA

for contributions to adaptive sensor systems in radar and communications

Aaron Bobick
Georgia Institute of Technology
Atlanta, GA, USA

for contributions to activity recognition in computer vision

Nuno Borges De Carvalho
Universidade de Aveiro
Aveiro, Portugal

for contributions on characterization and design of nonlinear RF circuits

Alberto Borghetti
University of Bologna
Bologna, Italy

for contributions to modeling of power distribution systems under transient conditions

2015 Newly Elevated Fellows

Olga Boric-Lubecke
University of Hawaii at Manoa
Honolulu, HI, USA

for contributions to biomedical microwave technology

Azzedine Boukerche
University of Ottawa
Ottawa, ON, Canada

for contributions to communication protocols for distributed mobile computing and wireless sensor networks

Victor Bright
University of Colorado
Boulder, CO, USA

for contributions to micro- and nano-electromechanical systems

Martin Buehler
Decagon Devices
Pullman, WA, USA

for contributions to metrology through development of semiconductor process control test structures, gas sensors and radiation detectors

Wolfram Burgard
University of Freiburg
Freiburg, Germany

for contributions to mobile robot navigation and simultaneous localization and mapping

Rajkumar Buyya
University of Melbourne
Melbourne, Australia

for contributions to cloud computing

2015 Newly Elevated Fellows

Christian Cachin
IBM Research Laboratory
Ruschlikon, Switzerland

for contributions to steganography and secure distributed systems

Ning Cai
Xidian University
Xi'an, China

for contributions to network coding theory and arbitrarily varying channels

Natalino Camilleri
Nitero, Inc.
Austin, TX, USA

for leadership in radio frequency integrated circuits and systems

Jiannong Cao
Hong Kong Polytechnic University
Kowloon, Hong Kong

for contributions to distributed computing in mobile wireless networks

Paolo Carbone
University of Perugia - Italy
Perugia, Italy

for contributions to quantization and data converter theory

Joseph Cavallaro
Rice University
Houston, TX, USA

for contributions to VLSI architectures and algorithms for signal processing and wireless communications

2015 Newly Elevated Fellows

Chandan Chakraborty
Indian Institute of Technology Kharagpur
Kharagpur, India

for contributions to estimation techniques and control of induction machine and drive systems

Elizabeth Chang
Curtin University, Australia
Perth, Australia

for contributions to industrial informatics and cyber physical systems

Biao Chen
Syracuse University
Syracuse, NY, USA

for contributions to decentralized signal processing in sensor networks and interference management of wireless networks

Chi-Chih Chen
Ohio State University
Columbus, OH, USA

for contributions wideband and miniature antennas

Xiaodong Chen
Queen Mary University of London
London, UK

for contributions to antennas for wireless communications and satellites

Ming Cheng
Southeast University
Nanjing, China

for contributions to the development and control of stator permanent magnet machines for vehicular propulsion and wind power generation

2015 Newly Elevated Fellows

Xiuzhen Cheng
George Washington University
Washington, DC, USA

for contributions to localization and detection in sensor networks

Howie Choset
Carnegie Mellon University
Pittsburgh, PA, USA

for contributions to the design, control and planning of highly-articulated robots

Jyh-Horng Chou
National Kaohsiung University
of Applied Sciences
Kaohsiung, Taiwan

for contributions to hybrid evolutionary optimization approaches for industrial applications

Henrik Christensen
Georgia Institute of Technology
Atlanta, GA, USA

for contributions to estimation methods for robot localization and mapping

Chen-Nee Chuah
University of California, Davis
Davis, CA, USA

for contributions to MIMO communications and network management

Mooi Choo Chuah
Lehigh University
Bethlehem, PA, USA

for contributions to wireless network system and protocol design

2015 Newly Elevated Fellows

Israel Cohen
Technion - Israel Institute of Technology
Haifa, Israel

for contributions to the theory and application of speech enhancement

Iain Collings
Commonwealth Scientific and Industrial
Research Organisation (CSIRO)
Epping, Australia

for contributions to multiple user and multiple antenna wireless communication systems

John Conley
Oregon State University
Corvallis, OR, USA

for contributions to semiconductor process technology to improve radiation hardening of MOS devices

Javier Contreras
University of Castilla La Mancha
Ciudad Real, Spain

for contributions to modeling and forecasting of electricity markets

Jordi Cortadella
Universitat Politecnica de Catalunya
Barcelona, Spain

for contributions to the design of asynchronous and elastic circuits

Tie Jun Cui
Southeast University
Nanjing, China

for contributions to microwave metamaterials and computational electromagnetics

2015 Newly Elevated Fellows

John Dallesasse
University of Illinois at Urbana-Champaign
Urbana, IL, USA

for contributions to oxidation of III-V semiconductors for photonic device manufacturing

Sajal Das
Missouri University of Science and Technology
Rolla, MO, USA

for contributions to parallel and distributed computing

Dipankar Dasgupta
University of Memphis
Memphis, TN, USA

for contributions to immunological computation and bio-inspired cyber security

Purnendu Dasgupta
University of Texas at Arlington
Arlington, TX, USA

for contributions to ion chromatography and analytical instrumentation for environmental studies

Michael Davies
University of Edinburgh
Edinburgh, UK

for contributions to sparse representations in signal processing and compressed sensing

Lieven De Lathauwer
KU Leuven
Leuven, Belgium

for contributions to signal processing algorithms using tensor decompositions

2015 Newly Elevated Fellows

Francisco de León
NYU Polytechnic School of Engineering
Brooklyn, NY, USA

for contributions to transformer modeling for electromagnetic transient studies

Mérouane Debbah
Ecole Supérieure d'électricité(SUPLEC)
Gif-sur-Yvette, France

for contributions to the theory and application of signal processing in wireless networks

Joseph C. Decuir
CSR Technology, Inc.
Issaquah, WA, USA

for contributions to computer graphics and video games

Michael A. Demetriou
Worcester Polytechnic Institute
Worcester, MA, USA

for contributions to estimation and optimization of distributed parameter systems

Laurent Desclos
Ethertronics Inc.
San Diego, CA, USA

for leadership in developing cellphone antenna technology

Murthy Devarakonda
IBM Watson Research Center
Yorktown Heights, NY, USA

for contributions to measurement-based analytics of distributed systems for data center optimization

2015 Newly Elevated Fellows

Peter Dinda
Northwestern University
Evanston, IL, USA

for contributions to virtualization technologies in adaptive and parallel computing

Edward Dobrowolski
North American Electric
Reliability Corporation
Atlanta, GA, USA

for leadership in interactive control center technology

Rolf Drechsler
University of Bremen
Bremen, Germany

for contributions to test and verification of electronic circuits and systems

Josef Drobnik
SPARQ Systems Inc.
Kingston, ON, Canada

for development of high performance power converters in industrial applications

Jeffrey Duerk
Case Western Reserve University
Cleveland, OH, USA

for contributions to rapid magnetic resonance imaging technologies

Alistair Duffy
De Montfort University
Leicester, UK

for development of validation methods in computational electromagnetics

2015 Newly Elevated Fellows

Frank Effenberger
Huawei Technologies, Inc.
Bridgewater, NJ, USA

for contributions to passive optical networking standards and technology

Carl Ekdahl
Los Alamos National Laboratory
Los Alamos, NM, USA

for contributions to high-power accelerator development and the generation and transport of electron beams for flash-radiography

Randy Ellis
Queen's University
Kingston, ON, Canada

for contributions to image guided surgical technology

Dara Entekhabi
Massachusetts Institute of Technology
Cambridge, MA, USA

for contributions to microwave remote sensing of soil moisture

Babak Fahimi
University of Texas at Dallas
Richardson, TX, USA

for contributions to modeling and analysis of AC adjustable speed motor drives

Pingzhi Fan
Southwest Jiaotong University
Chengdu, China

for contributions to signal design for wireless communications

2015 Newly Elevated Fellows

Weileun Fang
National Tsing Hua University (Taiwan)
Hsinchu, Taiwan

for contributions to measurement methods and process technologies for micro-electro-mechanical systems

Lorenzo Faraone
University of Western Australia
Crawley, Australia

for development of semiconductor optoelectronic materials and devices

Ernest Feleppa
Riverside Research Inst / Biomed
New York, NY, USA

for contributions to ultrasound imaging medical applications

Alan Finkel
Monash University
Clayton, Australia

for contributions to measurement technology for biomedicine

William Finley
Siemens Industry
Norwood, OH, USA

for leadership in global standardization of electric motors and energy conservation

Michael Fitz
TrellisWare Technologies, Inc.
San Diego, CA, USA

for contributions to the theory and practice of multiple antenna radio

2015 Newly Elevated Fellows

Michael Flynn
University of Michigan
Ann Arbor, MI, USA

for contributions to integrated analog-digital interfaces

Kenneth Foote
Woods Hole Oceanographic Institution
Woods Hole, MA, USA

for contributions to quantification of underwater sound scattering

Stephanie Forrest
University of New Mexico
Albuquerque, NM, USA

for contributions to computer security systems based on biological principles

Dieter Fox
University of Washington
Seattle, WA, USA

for contributions to Bayesian state estimation and robotic perception

Gordon Frazer
Defence Science and Technology Organisation
Edinburgh, Australia

for contributions to advanced over-the-horizon radar

Henry Fuchs
University of North Carolina at Chapel Hill
Chapel Hill, NC, USA

for contributions to computer graphics, virtual and augmented reality

2015 Newly Elevated Fellows

Pascale Fung
Hong Kong University of Science & Technology
Clear Water Bay, Hong Kong

for contributions to human-machine interactions

Xiqi Gao
Southeast University
Nanjing, China

for contributions to broadband wireless communications and multirate signal processing

Reza Ghodssi
University of Maryland, College Park
College Park, MD, USA

for contributions to materials and processes for microsystems technology

Amitabha Ghosh
Nokia Solutions and Networks
Arlington Heights, IL, USA

for leadership in cellular communication system standardization

Monisha Ghosh
Interdigital Communications, Inc.
Mellville, NY, USA

for contributions to cognitive radio and signal processing for communication systems

Patrick Girard
LIRMM (Laboratory of Informatics
Robotics and Microelectronics of Montpellier)
Montpellier, France

for contributions to power-aware testing of VLSI circuits

2015 Newly Elevated Fellows

Nachappa Gopalsami
Argonne National Laboratory
Lemont, IL, USA

for contributions to millimeter-wave spectroscopy, imaging, and reflectometry

Manimaran Govindarasu
Iowa State University
Ames, IA, USA

for contributions to security of power grids

Robert Gresham
Anokiwave
Billerica, MA, USA

for technical leadership in commercial automotive radar sensors

Min Gu
Swinburne University of Technology
Hawthorn, Australia

for contributions to multiphoton microscopy, endoscopy, and optical data storage

Josep Guerrero
Aalborg University
Aalborg, Denmark

for contributions to distributed power systems and microgrids

S. Gunasekaran
AFRL-Information Directorate
Rome, NY, USA

for contributions to high-performance computer vision algorithms for airborne applications

2015 Newly Elevated Fellows

Deepnarayan Gupta
HYPRES Inc
Elmsford, NY, USA

for contributions to superconductor digital radio-frequency receivers

Dan Gusfield
University of California at Davis
Davis, CA, USA

for contributions to combinatorial optimization and computational biology

Johnathan Hacker
Teledyne Scientific and Imaging
Thousand Oaks, CA, USA

for contributions to terahertz integrated circuits and devices

Paul Hale
National Institute of Standards
and Technology (NIST)
Boulder, CO, USA

for contributions to metrology of high-speed electronic and optoelectronic devices

Dan Halperin
Tel Aviv University
Tel Aviv, Israel

for contributions to robust geometric algorithms for robotics and automation

K.V.S. Hari
Indian Institute of Science (IISc)
Bangalore, India

for contributions to high-resolution signal parameter estimation

2015 Newly Elevated Fellows

Zhihai He
University of Missouri, Columbia
Columbia, MO, USA

for contributions to video communication and visual sensing technologies

Constance Heitmeyer
Naval Research Laboratory
Washington, DC, USA

for contributions to formal methods for modeling and analyzing software and systems

Abdelsalam (Sumi) Helal
University of Florida
Gainesville, FL, USA

for contributions to pervasive and mobile computing systems

Joerg Henkel
Karlsruhe Institute of Technology
Karlsruhe, Germany

for contributions to hardware/software codesign of embedded computing systems

Gary Hoffman
Advanced Power Technologies, LLC
Randolph, NJ, USA

for leadership in the advancement of monitoring systems for power transformers and power line protection

Toshikazu Hori
University of Fukui
Fukui, Japan

for contributions to broadband antennas for cellular and satellite communications

2015 Newly Elevated Fellows

Ray-Hua Horng
National Chung Hsing University
Taichung, Taiwan

for contributions to high brightness light emitting diodes

John Hossack
University of Virginia
Charlottesville, VA, USA

for contributions in ultrasound imaging and drug delivery

Ekram Hossain
University of Manitoba, Canada
Winnipeg, MB, Canada

for contributions to spectrum management and resource allocation in cognitive and cellular radio networks

Jianying Hu
IBM
Yorktown Heights, NY, USA

for contributions to pattern recognition in business and health analytics, and document analysis

Yi Hu
Quanta Technology
Raleigh, NC, USA

for leadership in wide-area synchronized measurement systems

Howard Huang
Alcatel-Lucent, Bell Labs
Murray Hill, NJ, USA

for contributions to multiple antenna techniques in wireless cellular networks

2015 Newly Elevated Fellows

Giuseppe Iannaccone
University of Pisa, Italy
Pisa, Italy

for contributions to modeling transport and noise processes in nanoelectronic devices

Meikei leong
TSMC Europe B.V.
Amsterdam, Netherlands

for leadership in development of advanced complementary metal-oxide-semiconductor device technologies

Makoto Iwasaki
Nagoya Institute of Technology
Nagoya, Japan

for contributions to fast and precise positioning in motion controller design

Ravishankar Iyer
Intel Corporation
Hillsboro, OR, USA

for contributions to computer architecture and cache/memory systems

Qiang Ji
Rensselaer Polytechnic Institute
Troy, NY, USA

for contributions to automatic facial image processing and affective computing

Hong Jiang
Intel Corporation
Santa Clara, CA, USA

for leadership in parallel multimedia computing architectures and systems

2015 Newly Elevated Fellows

Hong Jiang
University of Nebraska-Lincoln
Lincoln, NE, USA

for contributions to computer memory hierarchy and storage systems

Nihar Jindal
Broadcom Corporation
Irvine, CA, USA

for contributions to multiuser multi-antenna communications

James Jodice
J. A. Jodice & Associates
Manchester by the Sea, MA, USA

for contributions to the testing of protective relays

Richard Jones
New Zealand Brain Research Institute
Christchurch, New Zealand

for contributions to human performance engineering and neurorehabilitation

Anupam Joshi
University of Maryland Baltimore County
Baltimore, MD, USA

for contributions to security, privacy and data management in mobile and pervasive systems

Tzyy-Ping Jung
University of California, San Diego
La Jolla, CA, USA

for contributions to blind source separation for biomedical applications

2015 Newly Elevated Fellows

Mohan Kalkunte
Broadcom Corporation
Irvine, CA, USA

for contributions to ethernet switching architectures and merchant-switching silicon

Safa Kasap
University of Saskatchewan
Saskatoon, SK, Canada

for contributions to photoconductive sensors for x-ray imaging

Young-Han Kim
University of California, San Diego
La Jolla, CA, USA

for contributions to feedback communication and network information theory

Youngky Kim
Networks Business, Samsung Electronics
Suwon, South Korea

for leadership in mobile communication systems

Tsunenobu Kimoto
Kyoto University
Kyoto, Japan

for contributions to silicon carbide materials and devices

Simon King
University of Edinburgh
Edinburgh, UK

for contributions to text-to-speech synthesis and speech technology

2015 Newly Elevated Fellows

Stefanos Kollias
National Technical University of Athens
Athens, Greece

for contributions to intelligent systems for multimedia content analysis and human-machine interaction

Hiroshi Kondoh
Centellax, Inc.
Santa Rosa, CA, USA

for contributions to microwave and millimeter wave MMIC technologies

Christoforos Kozyrakis
Stanford University
Stanford, CA, USA

for contributions to high-performance, energy-efficient and secure memory systems

David Kriegman
University of California, San Diego
La Jolla, CA, USA

for contributions to computer vision

Deepa Kundur
University of Toronto
Toronto, ON, Canada

for contributions to signal processing techniques for multimedia and cyber security

Hao-chung Kuo
National Chiao Tung University
Hsinchu, Taiwan

for contributions to light emitting diodes and vertical cavity surface emitting lasers

2015 Newly Elevated Fellows

Gerard Lachapelle
University of Calgary
Calgary, AL, Canada

for contributions to signal processing for global navigation satellite systems

Sanjay Lall
Stanford University
Stanford, CA, USA

for contributions to control of networked systems

Edmund Lam
University of Hong Kong
Hong Kong, China

for contributions to modeling and computational algorithms in imaging applications

Christian Laurent
National Center for Scientific Research
Toulouse, France

for research of electrical aging and charge transport in insulating polymers

Paul Lecoq
European Organization for Nuclear Research (CERN)
Geneva, Switzerland

for contributions to scintillator detectors for high-energy physics and medical imaging

Paul Lee
Exelis Geospatial Systems
Amityville, NY, USA

for contributions to the development of CMOS image sensor technology and the pinned photo-diode active pixel sensor

2015 Newly Elevated Fellows

Thomas Lee
Stanford University
Stanford, CA, USA

for contributions to the design of CMOS radio-frequency integrated circuits

Henry Leung
University of Calgary
Calgary, AL, Canada

for contributions to chaotic communications and nonlinear signal processing

Steven Levitan
University of Pittsburgh
Pittsburgh, PA, USA

for contributions to mixed-technology micro-systems education

Baochun Li
University of Toronto
Toronto, ON, Canada

for contributions to application-layer network protocols and network coding

Keqin Li
State University of New York
New Paltz, NY, USA

for contributions to parallel and distributed computing

Ming-Jun Li
Corning Incorporated
Corning, NY, USA

for contributions to optical fiber technology

2015 Newly Elevated Fellows

Xiang-Yang Li
Illinois Institute of Technology
Chicago, IL, USA

for contributions to performance analysis and resource allocation in wireless networks

Daniel Lidar
University of Southern California
Los Angeles, CA, USA

for contributions to quantum information processing

Cheng-Lin Liu
Institute of Automation of
Chinese Academy of Sciences
Beijing, China

for contributions to handwritten document analysis

Ling Liu
Georgia Institute of Technology
Atlanta, GA, USA

for contributions to scalable Internet data management and decentralized trust management

Yong Liu
Fairchild Semiconductor Corp.
South Portland, ME, USA

for contributions in power electronics packaging

Yunhao Liu
Tsinghua University
Beijing, China

for contributions to wireless sensor networks and systems

2015 Newly Elevated Fellows

Zicheng Liu
Microsoft Research
Redmond, WA, USA

for contributions to visual processing for multimedia interaction

John Long
Delft University of Technology
Delft, The Netherlands

for the development of on-chip and silicon radio-frequency integrated circuits

Susan Lord
University of San Diego
San Diego, CA, USA

for professional leadership and contributions to engineering education

Wenjing Lou
Virginia Polytechnic Institute
and State University
Falls Church, VA, USA

for contributions to information and network security

David Love
Purdue University
West Lafayette, IN, USA

for contributions to feedback-adaptive wireless communication systems

Jianhua Lu
Tsinghua University
Beijing, China

for contributions to the theory and engineering applications of wireless transmission technologies

2015 Newly Elevated Fellows

David Lubkeman
North Carolina State University
Raleigh, NC, USA

for contributions to power system distribution systems

Giuseppe Macchiarella
Politecnico di Milano
Milano, Italy

for contributions to the synthesis of microwave filters and multiplexers

Abhijit Mahalanobis
Lockheed MartiN
Missiles and Fire Control
Orlando, FL, USA

for contributions to the development of correlation filters for automatic target recognition

Scott Mahlke
University of Michigan
Ann Arbor, MI, USA

for contributions to compiler code generation and automatic processor customization

Dragan Maksimovic
University of Colorado, Boulder
Boulder, CO, USA

for contributions to digital control of high-frequency switched-mode power converters

Roger Malik
First Solar
Santa Clara, CA, USA

for contributions to heterojunction compound semiconductor materials and devices

2015 Newly Elevated Fellows

Debendra Mallik
Intel Corporation
Chandler, AZ, USA

for contributions to microprocessor packaging

Diana Marculescu
Carnegie Mellon University
Pittsburgh, PA, USA

for contributions to design and optimization of energy-aware computing systems

Detlev Marpe
Fraunhofer Institute for Telecommunications
Berlin, Germany

for contributions to video coding research and standardization

Sylvain Martel
Ecole Polytechnique de Montreal
Montreal, QC, Canada

for contributions to medical micro- and nano-robotics

Luis Marti
Hydro One Networks Inc.
Toronto, ON, Canada

for contributions to modeling and simulation of electromagnetic transients

Yehia Massoud
Worcester Polytechnic Institute
Worcester, MA, USA

for contributions to the modeling and design of nanoscale interconnects

2015 Newly Elevated Fellows

Witold (Witek) Maszara
GLOBALFOUNDRIES
Santa Clara, CA, USA

for contributions to high performance CMOS process modules

Paolo Mattavelli
University of Padova
Padova, Italy

for contributions to power converters for grid-connected applications and power management

Gianluca Mazzini
University of Ferrara
Ferrara, Italy

for contributions to chaos-based electronic and telecommunication systems design

Stephen McArthur
University of Strathclyde
Glasgow, UK

for contributions to intelligent systems with application in power engineering

Timothy McCoy
United States Navy
Montross, VA, USA

for leadership in ship-board electric power systems

Patrick McDaniel
Penn State University
University Park, PA, USA

for contributions to the security of mobile communications

2015 Newly Elevated Fellows

Hong Mei
Peking University
Beijing, China

for contributions to software architecture and component-based software engineering

Shengwei Mei
Tsinghua University
Beijing, China

for contributions to power systems robust control and complexity analysis

Jean-Pierre Merlet
Institut National de Recherche en Informatique et Automatique (INRIA)
Sophia-Antipolis, France

for contributions to parallel robots

Mehran Mesbahi
University of Washington
Seattle, WA, USA

for contributions to networked control systems

Ethan L. Miller
University of California, Santa Cruz
Santa Cruz, CA, USA

for contributions to the design of file and storage systems

Stefan Mozar
Dynexsys Pty Ltd.
Glenwood, Australia

for development of safety solutions for electronic equipment

2015 Newly Elevated Fellows

Boris Murmann
Stanford University
Stanford, CA, USA

for contributions to the design of digitally-assisted analog integrated circuits

Tadao Nagatsuma
Osaka University
Osaka, Japan

for contribution to millimeter and terahertzwave communications using photonics

Krishna Narayanan
Texas A&M University
College Station, TX, USA

for contributions to coding for wireless communications and data storage

Paul Newman
University of Oxford
Oxford, UK

for contributions to robot navigation

Khai Ngo
Virginia Tech
Blacksburg, VA, USA

for contributions to unified synthesis and modeling of switched-mode converters

Alexandru Nicolau
University of California, Irvine
Irvine, CA, USA

for contributions to compiler technology and electronic design automation

2015 Newly Elevated Fellows

Tetsuji Oda
University of Tokyo
Tokyo, Japan

for contributions to electrostatics and high-pressure plasmas for environmental protection

Kiyoshi Ohishi
Nagaoka University of Technology
Nagaoka, Japan

for contributions to development of fast and robust motion control systems

Michael Orshansky
University of Texas at Austin
Austin, TX, USA

for contributions to VLSI design for manufacturability

Marek Osinski
University of New Mexico
Albuquerque, NM, USA

for contributions to analysis of optoelectronic materials and devices

Philip Overholt
US Dept. of Energy
Washington, DC, USA

for leadership in the development and deployment of synchrophasor technology

Teresa Pace
SenTech, LLC
Orlando, FL, USA

for contributions to image and signal processing algorithms for sensor systems

2015 Newly Elevated Fellows

Sokrates Pantelides
Vanderbilt University
Nashville, TN, USA

for contributions to point-defect dynamics in semiconductor devices

Unnikrishna Pillai
NYU Polytechnic School of Eng.
Brooklyn, NY, USA

for contributions to adaptive signal processing and radar systems

Antonio Plaza
University of Extremadura
Caceres, Spain

for contributions to hyperspectral data processing and parallel computing of Earth observation data

Mark Plumbley
Queen Mary University of London
London, UK

for contributions to latent variable analysis

David Pommerenke
Missouri University of Science and Technology
Rolla, MO, USA

for contributions to system-level electrostatic discharge technology

Radha Poovendran
University of Washington
Seattle, WA, USA

for contributions to security in cyber-physical systems

2015 Newly Elevated Fellows

Mircea Popescu
Motor Design Ltd.
Ellesmere, UK

for contributions to AC induction and permanent magnet electric machines

Robert Qiu
Tennessee Technological University
Cookeville, TN, USA

for contributions to ultra-wideband wireless communications

Bhaskar Ramamurthi
Indian Institute of Technology Madras
Madras, India

for development of wireless technology in India

Sundaram Ramesh
California State University, Northridge
Northridge, CA, USA

for contributions to entrepreneurship in engineering education

John Randall
Zyvex Labs
Richardson, TX, USA

for contributions to nanofabrication technologies and applications

Spiridon Reveliotis
Georgia Institute of Technology
Atlanta, GA, USA

for contributions to discrete event systems for resource allocation

2015 Newly Elevated Fellows

David Richardson
University of Southampton
Hampshire, UK

for contributions to optical fiber technology

Rasheek Rifaat
Jacobs Canada Inc.
Calgary, AB, Canada

for contributions to protection of industrial power systems

Eric Rotenberg
North Carolina State University
Raleigh, NC, USA

for contributions to the microarchitecture of high-performance and reliable microprocessors

Ahmed Rubaai
Howard University
Washington, DC, USA

for contributions to the development of high-performance controls for motor drives

Markus Rupp
Technical University Vienna
Wien, Austria

for contributions to adaptive filters and communication technologies

Ponnuswamy Sadayappan
Ohio State University
Columbus, OH, USA

for contributions to parallel programming tools for high-performance computing

2015 Newly Elevated Fellows

Safieddin Safavi-Naeini
University of Waterloo
Waterloo, ON, Canada

for contributions to gigahertz to terahertz integrated antenna systems

Robert Safranek
Benevue, Inc.
Warren, NJ, USA

for contributions to perceptual image and video compression and quality

Surya Santoso
University of Texas at Austin
Austin, TX, USA

for contributions in automated root cause analysis of electric power quality disturbance phenomena

Richard Schreier
Analog Devices Incorporated
Toronto, ON, Canada

for contributions to delta-sigma data converters

Luca Selmi
University of Udine
Udine, Italy

for research on carrier transport and reliability of semiconductor devices

Michael Shebanow
Samsung - San Jose, CA
San Jose, CA, USA

for contributions to superscalar out-of-order processors

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Peng Shi
University of Adelaide
Adelaide, Australia

for contributions to control and filtering techniques for hybrid dynamical systems

James Shields
Draper Laboratory
Cambridge, MA, USA

for leadership in advanced guidance, navigation and information systems

Yoshihiro Shiroishi
Hitachi Research & Dev. Group
Hitachi Ltd.
Tokyo, Japan

for leadership in the development of high density magnetic recording technologies and devices

Moshe Shoham
Technion - Israel Institute of Technology
Haifa, Israel

for contributions to robot manipulators and miniature medical robots

Mario Silveirinha
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Coimbra, Portugal

for contributions to electrodynamics of metamaterials

Gail Skofronick Jackson
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Greenbelt, MD, USA

for contributions to microwave remote sensing of snow

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for contributions to audio source separation and audio processing

Peter Smith
University of Canterbury
Canterbury, New Zealand

for contributions to statistical modeling and analysis of wireless communication systems

Hing Cheung So
City University of Hong Kong
Hong Kong, China

for contributions to spectral analysis and source localization

Haruhisa Soda
FiBest Limited
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for contributions to vertical-cavity surface-emitting and distributed-feedback lasers

William Song
MIT Lincoln Laboratory
Lexington, MA, USA

for contributions in high-performance low-power embedded processors

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GE Healthcare
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for contributions to medical imaging with positron emission tomography

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for contributions to visual and haptic communications

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Honeywell International, Inc.
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for contributions to model-based control of industrial systems

Stefano Stramigioli
University of Twente
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for contributions to modeling, control and realization of complex robotics systems

Suresh Subramaniam
George Washington University
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for contributions to optical network architectures, algorithms, and performance modeling

Ponnuthurai Suganthan
Nanyang Technological University
Singapore, Singapore

for contributions to optimization using evolutionary and swarm algorithms

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City University of Hong Kong
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for contributions to robot-aided manipulation of biological cells

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Troy, NY, USA

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Yu Sun
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for contributions to automated manipulation of biological cells

Dan Keun Sung
Korea Advanced Institute of
Science and Technology (KAIST)
Daejeon, Korea

for contributions to network resource management

Wonyong Sung
Seoul National University
Seoul, Korea

for contributions to real-time signal processing systems

Johan Suykens
KU Leuven
Leuven, Belgium

for developing the least squares support vector machines

Dacheng Tao
University of Technology, Sydney
Sydney, Australia

for contributions to pattern recognition and visual analytics

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Cardiff, UK

for contributions to microwave measurements and their application to microwave models

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University of New South Wales
Sydney, Australia

for contributions to image and video communications

Fernando Teixeira
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for contributions to time-domain electromagnetic techniques and applications

Rajeev Thottappillil
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for contributions to the understanding of lightning and electromagnetic interference

Yuichi Tohmori
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for contributions to tunable semiconductor lasers for optical fiber communications

Ridha Touzi
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for contributions to design and calibration of polarimetric synthetic aperture radar

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Harry Trentelman
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Groningen, Netherlands

for contributions to geometric theory of linear systems and behavioral models

James Truchard
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for leadership in instrumentation and computing for signal processing

Masashi Usami
KDDI Corporation
Saitama, Japan

for contributions to development of high reliability semiconductor optical devices for undersea cable systems

Vesa Valimaki
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Espoo, Finland

for contributions to synthesis and processing of audio signals

Son Van Nghiem
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for contributions to cryospheric sciences and Earth remote sensing applications

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for contributions to high-field magnetic resonance imaging technology

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for contributions to on-line detection of oscillatory behavior of electric power systems

Michel Verleysen
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for contributions to high-dimensional analysis and manifold learning

Mahesh Viswanathan
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for contributions to ubiquitous access to cloud computing and to vehicular speech communications

Yurii Vlasov
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Yorktown Heights, NY, USA

for contributions to silicon-integrated nanophotonics

Alexander Waibel
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for contributions to neural network based speech recognition and translation and multimodal interfaces

Jian-Ping Wang
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Minneapolis, MN, USA

for contributions to magnetic material and spintronic devices for magnetic recording, information processing and biomedical applications

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Monash University
Clayton, Australia

for contributions to machine learning, data mining and knowledge discovery

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Texas A&M University at Qatar
Doha, Qatar

for contributions to international development of engineering education

David Weiss
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Ames, IA, USA

for contributions to software measurement and product line engineering

Dieter Weller
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San Jose, CA, USA

for contributions to heat-assisted magnetic recording media

Blake Wilson
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Durham, NC, USA

for development of cochlear implants

An-Yeu (Andy) Wu
National Taiwan University
Taipei, Taiwan

for contributions to DSP algorithms and VLSI designs for communication IC/SoC

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Baton Rouge, LA, USA

for contributions to digital video broadcasting and wireless systems

Ji Wu
National Space Science Center
Beijing, China

for leadership in microwave remote sensing and its application to satellite programs

Gaozhi Xiao
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Ottawa, ON, Canada

for contributions to the development of safety and security monitoring instrumentation and measurement technologies

Xiaolan Xie
Ecole Nationale Supérieure
des Mines de Saint Etienne
Saint Etienne, France

for contributions to systems engineering for healthcare and manufacturing

Yuan Xie
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University Park, PA, USA

for contributions to design automation and architecture of three-dimensional integrated circuits

Isao Yamada
Tokyo Institute of Technology
Tokyo, Japan

for contributions to inverse problems and learning in signal processing

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Liuqing Yang
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Fort Collins, CO, USA

for contributions to theory and practice of ultra-wideband communications

Olexander Yarovyj
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Delft, The Netherlands

for leadership in ultra-wideband imaging for ground penetrating radar and microwave scanners

Aylin Yener
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for contributions to wireless communication theory and wireless information security

Bulent Yener
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for contributions to network design optimization and security

Wang Yi
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Uppsala, Sweden

for contributions to safety-critical real-time systems

Chik Patrick Yue
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for contributions to the advancement of CMOS radio-frequency integrated circuits and device modeling

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for contributions to cryptography

Navid Zargari
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for contribution to medium voltage drive technologies and applications

Huanguang Zhang
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for contributions to stability analysis of recurrent neural networks and intelligent control of nonlinear systems

Wei Zhang
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for contributions to cognitive radio communications

Wei-Bin Zhang
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for contributions to cooperative vehicle highway automation systems

Yin Zhang
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for contributions to computer network measurement and management

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for contributions to molecular beam epitaxy growth technology, infrared lasers and photodetectors

Zhijun Zhang
Tsinghua University
Beijing, China

for contributions to antenna design and propagation modeling in mobile communication devices

Haitao Zheng
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Santa Barbara, CA, USA

for contributions to dynamic spectrum access and cognitive radio networks

Yahong Zheng
Missouri University of Science & Technology
Rolla, MI, USA

for contributions to channel modeling and equalization for wireless communications

Kun Zhou
Zhejiang University
HangZhou, China

for contributions to shape modeling and GPU computing

Yuanyuan Zhou
University of California, San Diego
La Jolla, CA, USA

for contributions to scalable algorithms and tools for computer reliability