

## 2010 Class of Newly Elevated Fellows

Raj Acharya  
The Penn State University  
University Park, PA, USA  
*for contributions to biomedical imaging and bioinformatics*

Tinku Acharya  
Intellectual Ventures  
Kolkata, West Bengal, India  
*for contributions to very large scale integration algorithms and architectures for electronic image processing*

Charu Aggarwal  
IBM Research  
Hawthorne, NY, USA  
*for contributions to knowledge discovery and data mining techniques*

John Edward Allen  
Oxford University, UK  
Oxford, England  
*for contributions to high current radio frequency discharges, sheath and wave phenomena, and electronegative and dusty plasmas*

Eitan Altman  
INRIA  
Sophia-Antipolis, PACA, France  
*for contributions to analysis, optimization, and control of telecommunication networks*

Srinivas Aluru  
Iowa State University  
Ames, IA, USA  
*for contributions to computational biology*

Nancy M. Amato  
Texas A&M University  
College Station, TX, USA  
*for contributions to the algorithmic foundations of motion planning in robotics and computational biology*

Joerg Appenzeller  
Birck Nanotechnology Center  
West Lafayette, IN, USA  
*for contributions to carbon nanotube transistors and circuits*

Shigehisa Arai  
Quantum Nanoelectronics Research Center  
Meguro-ku, Tokyo, Japan  
*for contributions to single-mode semiconductor lasers for optical communications*

Kazutami Arimoto  
Renesas Technology Corporation  
Itami, Hyogo, Japan  
*for development of high-density dynamic random access memory and embedded memory*

David A. Bader  
Georgia Institute of Technology  
Atlanta, GA, USA  
*for contributions to parallel algorithms for combinatorial problems and computational biology*

James Baker-Jarvis  
National Institute of Standards and Technology  
Boulder, CO, USA  
*for contributions to dielectric measurement and analysis of microwave measurement structures*

Shanker Balasubramaniam  
Michigan State University  
East Lansing, MI, USA  
*for contributions to time and frequency domain in computational electromagnetics*

Martin J. Bastiaans  
Eindhoven University of Technology  
Eindhoven, The Netherlands  
*for contributions to signal processing for optical signals and systems*

Polina Bayvel  
University College London (UCL)  
London, UK  
*for contributions to the design of optical networks, with emphasis on wavelength-routing architectures and mitigation of optical-fiber impairments*

Alberto Bemporad  
University of Siena, Italy  
Siena, Italy  
*for contributions to predictive control of constrained linear and hybrid systems*

Shmuel (Sam) Ben-Yaakov  
Ben-Gurion University of the Negev  
Beer Sheva, Israel  
*for development of modeling and simulation methodologies for pulse width modulated and resonant converters*

Dawant M. Benoit  
Vanderbilt University  
Nashville, TN, USA  
*for contributions to biomedical image analysis and image guided medical interventions*

Samuel Paul Benz  
National Institute of Standards and Technology  
Boulder, CO, USA  
*for contributions to quantum-based Josephson junction array waveform synthesizer*

Theodore William Berger  
University of Southern California  
Rancho Palos Verdes, CA, USA  
*for contributions to nonlinear systems modeling of neural tissue and development of neural prostheses*

Jennifer T. Bernhard  
University of Illinois at Urbana-Champaign  
Urbana, IL, USA  
*for development of multifunctional, reconfigurable, and integrated antennas*

Joseph Ernest Berthold  
Ciena Corporation  
Fallston, MD, USA  
*for leadership in optical internetworking*

Dieter H. Bimberg  
Technical University of Berlin  
Berlin, Germany  
*for advancement of semiconductor nanostructures, and development of self-organized quantum dot lasers*

E. Grady Booch  
IBM Thomas J. Watson Research Center  
Littleton, CO, USA  
*for contributions in software engineering and creation of the Unified Modeling Language*

Athman Bouguettaya  
CSIRO (Commonwealth Scientific and Industrial Research Organization)  
Acton, ACT, Australia  
*for contributions to large scale autonomous and heterogeneous databases and service-oriented computing*

James Edward Bowen  
Powell Electrical Systems  
Houston, TX, USA  
*for leadership in "safety by design" in electrical substation engineering*

Georg Anton Brasseur  
Graz University of Technology  
Graz, Styria, Austria  
*for developments in electronic diesel engine control*

Lionel C. Briand  
Simula Research Laboratory  
Lysaker, Norway  
*for contributions to testing of object-oriented software systems*

Shira L. Broschat  
Washington State University  
Pullman, WA, USA  
*for contributions to modeling of rough surface electromagnetic scattering*

Lorenzo Bruzzone  
University of Trento  
Trento, Italy  
*for contributions to pattern recognition and image processing for remote sensing*

Francesco Bullo  
University of California at Santa Barbara  
Santa Barbara, CA, USA  
*for contributions to geometric and cooperative control with applications to mechanical and robotic systems*

Douglas Christopher Burger  
The University of Texas at Austin  
Redmond, WA, USA  
*for contributions to processor and memory systems*

Edgar Herbert Callaway  
Motorola, Inc.  
Plantation, FL, USA  
*for contributions to wireless sensor networks and low power design techniques for communications devices and systems*

Christophe Caloz  
École Polytechnique, Montréal  
Montréal, QC, Canada  
*for contributions to the development and application of electromagnetic metamaterial structures*

Sandoval Carneiro  
Federal University of Rio De Janeiro  
Rio De Janeiro, RJ, Brazil  
*for leadership in power systems research and engineering education*

Ahmet Enis Cetin  
Bilkent University  
Ankara, MN, Turkey  
*for contributions to signal recovery and image analysis algorithms*

Srimat T. Chakradhar  
NEC Laboratories America  
Manalapan, NJ, USA  
*for contributions to digital integrated circuit testing*

Chein-I Chang  
University of Maryland Baltimore County  
Baltimore, MD, USA  
*for contributions to hyperspectral image processing*

Gary W. Chang  
National Chung Cheng University  
Chia-Yi, Taiwan  
*for contributions to power system harmonics and interharmonics*

Kuo-chu Chang  
George Mason University  
Fairfax, VA, USA  
*for contributions to multisensor data fusion and Bayesian inference*

Norman Ross Chapman  
University of Victoria  
Victoria, BC, Canada  
*for contributions to geoacoustic characterization of ocean bottom environments*

Amitava Chatterjee  
Texas Instruments Inc  
Dallas, TX, USA  
*for contributions to complementary metal oxide semiconductor device technology and on-chip electrostatic discharge protection*

Hsiao-Hwa Chen  
National Cheng Kung University  
Tainan, Taiwan  
*for contributions to radio resource allocation in code division multiple wireless systems*

Zhizhang David Chen  
Dalhousie University  
Halifax, Nova Scotia, Canada  
*for contributions to time-domain electromagnetic modeling and simulation*

Wood-Hi Cheng  
National Sun Yat-sen University  
Kaohsiung, Taiwan  
*for contributions to high-speed semiconductor lasers and photonic package technology*

Stefano Chiaverini  
Università di Cassino  
Cassino, FR, Italy  
*for contribution to kinematics and control of robot manipulators and autonomous vehicles*

Isamu Chiba  
Mitsubishi Electric Corporation  
Kamakura, Kanagawa, Japan  
*for leadership in high precision phased array antenna systems with digital signal processing*

Greg Chirikjian  
Johns Hopkins University  
Baltimore, MD, USA  
*for contributions to hyper-redundant manipulators*

Roy D. Cideciyan  
IBM Zurich Research Laboratory  
Ruschlikon, Zurich, Switzerland  
*for contributions to signal processing and constrained coding for magnetic recording*

Thomas Jay Cloonan  
ARRIS  
Lisle, IL, USA  
*for leadership in development of cable modem termination systems*

Laurent D. Cohen  
CNRS, France  
Neuilly-Sur-Seine, France  
*for contributions to computer vision technology for medical imaging*

Danny Cohen  
Sun Microsystems, Inc.  
Menlo Park, CA, USA  
*for contributions to protocols for packet switching in real-time applications*

Robert Joseph Comisso  
Naval Research Laboratory  
Washington, DC, USA  
*for contributions to high-voltage pulsed-power systems, and high-current pulsed plasmas for opening switches*

Peter M. Corcoran  
National University of Ireland , Galway  
Cregg, Claregalway, Co. Galway, Ireland  
*for contributions to digital camera technologies*

Christine Ann Coverdale  
Sandia National Laboratories  
Albuquerque, NM, USA  
*for contributions to the development of neutron sources*

Mariesa L. Crow  
Missouri University of Science & Technology  
Rolla, MO, USA  
*for contributions to power engineering education and to computational methods for power system analysis*

Raffaello D'Andrea  
ETH Zurich  
Zurich, Switzerland  
*for contributions to control of multi-vehicle of autonomous systems*

Mario Dagenais  
University of Maryland  
College Park, MD, USA  
*for contributions to photon correlation, semiconductor devices, and integration technologies*

David Daniels  
ERA Technology  
Leatherhead, Surrey, UK  
*for contributions to Ground-Penetrating Radar*

Michel Defrise  
Vrije Universiteit Brussel  
Brussels, Belgium  
*for contributions to computer tomography*

Paul Emerson Dodd  
Sandia National Laboratories  
Albuquerque, NM, USA  
*for contributions to the understanding and simulation of single-event effects in microelectronics*

Ray Dolby  
Dolby Laboratories  
San Francisco, CA, USA  
*for leadership in developing and commercializing practical noise reduction technology*

Robert D. Doverspike  
AT&T Labs Research  
Middletown, NJ, USA  
*for contributions to architectures, modeling, and optimization of telecommunication networks*



Dominique M. Durand  
Case Western Reserve University  
Cleveland, OH, USA  
*for contributions to the understanding of electromagnetic fields of human neurology*

Benjamin John Eggleton  
University of Sydney  
NSW 2006, Australia  
*for contributions to the development and applications of Bragg gratings and other periodic structures in optical fibers*

Hesham M. El-Gamal  
Ohio State University  
Columbus, OH, USA  
*for contributions to multiple-input multiple-output and cooperative communications*

Ahmed K. El-Magarmid  
Purdue University  
West Lafayette, IN, USA  
*for contributions to transaction management, data integration and quality*

Elmootazbellah N. Elnozahy  
IBM Corporation  
Austin, TX, USA  
*for contributions to rollback-recovery, low-power computing, highly-available file systems, and reliable computing systems*

Jose Antonio Encinar Garcinuno  
Universidad Politecnica De Madrid  
Madrid, Spain  
*for contributions to analysis and design of reflectarray antennas*

Diane L. Evans  
Jet Propulsion Laboratory  
Pasadena, CA, USA  
*for leadership in understanding of the Earth system through observations from space*

Long-Sheng Fan  
National Tsing Hua University  
San Jose, CA, USA  
*for contributions to Micro Electro-Mechanical Systems*

Ian Thomas Ferguson  
Georgia Institute of Technology  
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*for the development of semiconductor materials and devices for infrared and ultraviolet sensor applications*

Katherine Ferrara  
University of California, Davis  
Davis, CA, USA  
*for contributions to ultrasound and its applications in molecular imaging and drug delivery*

Mário Alexandre Teles Figueiredo  
Technical University of Lisbon Portugal  
Lisboa, Portugal  
*for contributions to pattern recognition and computer vision*

Daniel R. Fuhrmann  
Michigan Technological University  
Houghton, MI, USA  
*for contributions to adaptive radar signal processing*

Lixin Gao  
University of Massachusetts Amherst  
Amherst, MA, USA  
*for contributions to internet protocol and network routing*

George C. Giakos  
The University of Akron  
Akron, OH, USA  
*for contributions to efficient imaging devices, systems and techniques*

Yogesh B. Gianchandani  
University of Michigan  
Ann Arbor, MI, USA  
*for contributions to silicon-based microactuators and on-chip microplazmas*

Gennady Gildenblat  
Arizona State University  
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*for contributions to modeling of metal-oxide semiconductor field effect transistors*

Marc Hillel Goldberg  
ASSIA, Inc.  
Redwood City, CA, USA  
*for leadership in the development and commercialization of spectrally efficient wireless communications systems.*

Charles Louis Goldsmith  
MEMtronics Corporation  
Plano, TX, USA  
*for development of micro-electromechanical capacitive switches*

Aniruddha M. Gole  
University of Manitoba  
Winnipeg, Manitoba, Canada  
*for contributions to the modeling of power electronics apparatus*

Ganesh Kumar Gopalakrishnan  
Independent Consultant  
Bethesda, MD, USA  
*for leadership in microwave photonics and high-speed optical lithium niobate modulator development*

William D. Gropp  
University of Illinois at Urbana Champaign  
Urbana, IL, USA  
*for contributions to high performance computing and message passing*

Guoxiang Gu  
Louisiana State University  
Baton Rouge, LA, USA  
*for contributions to robust identification and control*

Pier Francesco Guarguaglini  
Finmeccanica  
Rome, Italy  
*for leadership in aviation, aerospace and defense communities*

Donald Urban Gubser  
Naval Research Laboratory  
Washington, DC, USA  
*for contributions to applied superconductivity*

Edward Gulski  
Delft University of Technology  
Delft, The Netherlands  
*for application of partial discharges to diagnosis of high voltage components*

Baining Guo  
Microsoft Research Asia  
Haidian District, Beijing, China  
*for contributions to surface appearance modeling and rendering in computer graphics*

Ali Hajimiri  
California Institute of Technology  
Pasadena, CA, USA  
*for development of high-speed silicon integrated-circuit oscillators, power amplifiers, and phased arrays*

Hiroyuki Hama  
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*for contributions to compact and reliable high-voltage equipment*

Baher Haroun  
Texas Instruments Inc  
Dallas, TX, USA  
*for development of submicron digital complementary metal-oxide semiconductor for wireless systems-on-chip*

Richard Alan Hartlein  
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Atlanta, GA, USA  
*for contributions to standards and analytical techniques for underground power cable systems*

Richard Ian Hartley  
Australian National University  
Canberra, ACT, Australia  
*for contributions to computer vision industrial applications*

Yutaka Hata  
University of Hyogo  
Himeji, Hyogo Prefecture, Japan  
*for contributions to fuzzy logic based image processing in biomedical informatics*

Xiangning He  
Zhejiang University  
Hangzhou, Zhejiang, China  
*for leadership in establishing a power electronics research institute in China*

Joseph Hellerstein  
Google, Inc.  
Seattle, WA, USA  
*for contributions to control engineering for performance management of computing systems*

James Hendler  
Rensselaer Polytechnic Institute  
Troy, NY, USA  
*for contributions to artificial intelligence, and development of the semantic web*

Burkard Hillebrands  
Technical University Kaiserslautern  
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*for contributions to the understanding of magnetic excitations, including linear and nonlinear spin waves*

Christopher L. Holloway  
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Boulder, CO, USA  
*for application of new material in the field of electromagnetic compatibility*

Masashi Horiguchi  
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*for contributions to circuit technologies for high-density low-power memories*

Bedrich Jaroslav Hosticka  
Fraunhofer Inst. Of Microelectronic Circuits and Systems  
Duisburg, Germany  
*for contributions to analog integrated circuits and sensor systems*

Powen Hsu  
National Taiwan University  
Taipei, Taiwan  
*for leadership in electrical engineering education*

Ching-Wen Hsue  
National Taiwan Univ. of Science & Technology (NTUST)  
Taipei, Taiwan  
*for contribution to discrete-time signal processing in microwave engineering*

Qing Hu  
Massachusetts Institute of Technology  
Cambridge, MA, USA  
*for contributions to terahertz (THz) quantum-cascade lasers and applications*

John Impagliazzo  
Qatar University  
Doha, Qatar  
*for contributions to computing education*

Yannis Ioannidis  
University of Athens  
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*for contributions to database systems including query optimization and data management*

Dimitrios Evangelos Ioannou  
George Mason University  
Fairfax, VA, USA  
*for contributions to reliability and characterization of silicon-on-insulator devices and materials*

Arthur Thomas Johnson  
University of Maryland  
College Park, MD, USA  
*for leadership in bioengineering education*

David R. Kaeli  
Northeastern University  
Boston, MA, USA  
*for contributions to profile-guided optimization algorithms and dynamic branch prediction designs*

Andrew B. Kahng  
UC San Diego  
La Jolla, CA, USA  
*for contributions to the design for manufacturability of integrated circuits, and the technology roadmap of semiconductors*

Shivkumar Kalyanaraman  
IBM India Research Laboratory  
Bangalore, Karnataka, India  
*for contributions to traffic management in computer communication networks*

Pooi Yuen Kam  
National University of Singapore  
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*for contributions to receiver design and performance analysis for wireless communications*

Yoshio Karasawa  
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Chofu, Tokyo, Japan  
*for contributions to the measurement and modeling of propagation effects in radio communication systems*

Mohammad A. Karim  
Old Dominion University  
Norfolk, VA, USA  
*for leadership in engineering education through creation of interdisciplinary programs*

Matti A. Karjalainen  
Helsinki University of Technology- TKK  
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*for contributions to perceptual audio signal modeling and processing*

Nikola Kirilov Kasabov  
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*for the applications of neural networks and hybrid systems in computational intelligence*

David Clark Keezer  
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Atlanta, GA, USA  
*for contributions to high-speed digital test technology*

Takamaro Kikkawa  
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Higashi-Hiroshima, Hiroshima, Japan  
*for contributions to interconnect technologies for integrated circuits*

Fanny Klett  
Fraunhofer Institute Digital Media Technology  
Ilmenau, Germany  
*for contributions to development and application of educational technologies*

Yasuo Kokubun  
Yokohama National University  
Yokohama, Japan  
*for contributions to integrated photonic devices*

Johann Walter Kolar  
Swiss Federal Institute of Technology (ETH) Zurich  
Zurich, Switzerland  
*for contributions to three-phase pulsed width modulation converter systems*

Venkat Sharma Kolluri  
Entergy Corporation  
Metairie, LA, USA  
*for the application of advanced technologies to voltage stability problems*

Rhee Jin Koo  
Dongguk University  
Seoul, Korea  
*for contributions to Gallium Arsenide, Microwave and Millimeter-wave Monolithic Integrated Circuits*

Bart Kosko  
University of Southern California  
Los Angeles, CA, USA  
*for contributions to neural and fuzzy systems*

Shiban Koul Koul  
Indian Institute of Technology Delhi  
Delhi, India  
*for contributions to analysis and design of microwave and millimeter wave components and circuits*

Gerhard Guenter Theodor Kramer  
University of Southern California  
Los Angeles, CA, USA  
*for contributions to coded modulation, iterative decoding, and cooperative communications*



Uwe Erich Kraus  
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Wuppertal, Germany  
*for contributions to digital television signal compression and transmission*

Marwan Krunz  
University of Arizona  
Tucson, AZ, USA  
*for contributions to resource management policies in wireless networks*

Jun-ichi Kushibiki  
Tohoku University  
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*for contributions to ultrasonic metrology and acoustic microscopy*

Richard Lai  
Northrop Grumman Aerospace Systems  
Redondo Beach, CA, USA  
*for development and space-qualified insertion of millimeter-wave transistor and integrated-circuit technologies*

Andrew Francis Laine  
Columbia University  
New York, NY, USA  
*for contributions to wavelet applications in digital mammography, and ultrasound image analysis*

Tor Sverre Lande  
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Oslo, Norway  
*for contributions to low-power subthreshold circuit design*

Michael Arthur Laughton  
Queen Mary University of London  
London, UK  
*for contributions to the understanding of power systems dynamics*

Roger George Lawrence  
RGL Solutions  
Cary, NC, USA  
*for contributions to energy efficient Adjustable Speed Drive systems*

Yusuf Leblebici  
Swiss Federal Institute of Technology  
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*for contributions to reliability and design techniques for integrated circuits and systems*

Chang-Hee Lee  
Korea Advanced Institute of Science and Technology(KAIST)  
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*for contributions to wavelength division multiplexed-passive optical network*

Seong-Whan Lee  
Korea University  
Seoul, Korea  
*for contributions to pattern recognition for biometrics and document image analysis*

Patrick M. Lenahan  
Pennsylvania State University  
University Park, PA, USA  
*for contributions to understanding of radiation damage and reliability of metal-oxide semiconductor devices*

James V. Leonard  
Boeing  
St. Charles, MO, USA  
*for contributions to the integration of military avionics*

Ping Li  
City University of Hong Kong  
Hong Kong, China  
*for contributions to iterative signal processing, multi-user detection and concatenated error control codes*

Wanjiun Liao  
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*for contributions to communication protocols in multimedia networking*

Jenshan Lin  
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*for contributions to integrated microwave circuits and systems for wireless sensors*

Ching-Fuh Lin  
National Taiwan University  
Taipei, Taiwan  
*for contributions to broadband semiconductor optical devices*

Chih-Min (Jimmy) Lin  
Yuan Ze University  
Chung-Li, Taiwan  
*for contributions to fuzzy system, neural network, and cerebellar model articulation controllers*

Lih Y. Lin  
University of Washington  
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*for contributions to optical micro-electro-mechanical systems switching technologies*

Kwei-Jay Lin  
University of California, Irvine  
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*for contributions to imprecise computations for scheduling real-time systems*

Bernabe Linares Barranco  
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*for contributions to the design and application of linear and nonlinear circuits in neuromorphic systems*

Duixian Liu  
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*for contributions to portable system and millimeter wave antenna design*

Shen-luan Liu  
National Taiwan University  
Taipei, Taiwan  
*for contributions to high-speed phase-locked and delay-locked loop circuit design*

Rich Liu  
Macronix International Co. Ltd.  
Hsinchu, Taiwan  
*for leadership in electron-beam mask writing, interconnects, and non-volatile technology development*

Chang Liu  
Northwestern University  
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*for contributions to bio-inspired and polymer micro electro-mechanical systems*

John C.S. Lui  
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*for contributions to performance modeling and analysis of storage communication systems and peer-to-peer networks*

Stan Lumish  
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*for leadership in the development and implementation of commercial terrestrial lightwave systems*

Kevin Michael Lynch  
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*for contributions to robotic manipulation, motion planning, and control of mechanical systems*

Soren Norvang Madsen  
Jet Propulsion Laboratory  
Pasadena, CA, USA  
*for leadership in the design and development of airborne and spaceborne remote sensing instruments*

Andrew Marshall  
Texas Instruments  
Dallas, TX, USA  
*for contributions to process development and design of integrated circuits*

Margaret Rose Martonosi  
Princeton University  
Princeton, NJ, USA  
*for contributions to power-efficient computer architecture and systems design*

Peter Marwedel  
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*for contributions to compilation techniques and embedded system design*

Tadashi Matsumoto  
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*for contributions to signal processing for wireless communications*

Larry Henry Matthies  
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*for contributions to perception systems for autonomous navigation of unmanned vehicles*

Peter Clive Maxwell  
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San Jose, CA, USA  
*for contributions to testing of digital logic circuits*

Mark Thomas Maybury  
The MITRE Corporation  
Bedford, MA, USA  
*for contributions to language processing, broadcast video analysis, and intelligent user interfaces*

Imran I. Mehdi  
Jet Propulsion Laboratory  
Pasadena, CA, USA  
*for contributions to submillimeter-wave device technology*

Francisco Medina Mena  
University of Seville  
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*for contributions to the analysis and physical understanding of planar structures, anisotropic media, and metamaterials*

Carmen S. Menoni  
Colorado State University  
Fort Collins, CO, USA  
*for contributions to nano-scale imaging with ultraviolet lasers, and semiconductor optical materials and devices*

Peyman Milanfar  
University of California, Santa Cruz  
Santa Cruz, CA, USA  
*for contributions to inverse problems and super-resolution in imaging*

Jovica Milanovic  
University of Manchester  
Manchester, UK  
*for contributions to power system dynamics and power quality*

Victor Saul Miller  
IDA Center for Communications Research  
Princeton, NJ, USA  
*for contributions to elliptic curve cryptography*

Craig Hillard Miller  
Bellevue, WA, USA  
*for research on discharges and electrical insulation in vacuum*

Dejan Spasoje Milojevic  
Hewlett Packard  
Palo Alto, CA, USA  
*for contributions to distributed systems software and mobile programming abstractions*

Kaizad Romy Mistry  
Intel Corporation  
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*for contributions to high performance complementary metal-oxide semiconductor technology and reliability*

Joseph Mitola  
Steven Institute of Technology  
Gainesville, FL, USA  
*for contribution to software-defined and cognitive radio technologies*

Prasant Mohapatra  
University of California, Davis  
Davis, CA, USA  
*for contributions to the quality of service provisioning in computer networks*

Lon W. Montgomery  
Siemens Energy, Inc.  
Orlando, FL, USA  
*for contributions to design of large synchronous generators*

Randolph Lyle Moses  
The Ohio State University  
Columbus, OH, USA  
*for contributions to statistical signal processing*

Eliot Blakeslee Moss  
University of Massachusetts Amherst  
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*for contributions to transactional computing and memory management*

Eduard Muljadi  
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*for contributions to wind turbine control and integration of wind power into the power system grid*

Robin Roberson Murphy  
Texas A&M University  
College Station, TX, USA  
*for contributions to rescue robotics and insertion of robots into major disasters*

Ashwini Kumar Nanda  
HPC Research Inc  
New Delhi, India  
*for leadership in high performance computer systems*

Arokia Nathan  
University College London  
London, UK  
*for contributions to thin film transistor technologies*

M. Hashem Nehrir  
Montana State University  
Bozeman, MT, USA  
*for contributions to alternative energy power generation*

David Thomas Neilson  
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Holmdel, NJ, USA  
*for contributions to optical switching technologies for telecommunication networks*

Kwok Kwok Ng  
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*for contributions to the optimization of intrinsic parasitics in metal-oxide semiconductor field-effect transistor design*

Willie W. Ng  
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*for the application of photonic technologies to microwave antenna systems and ultra-wideband signal processing*

Aria Nosratinia  
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Richardson, TX, USA  
*for contributions to multimedia and wireless communications*

Robert Nowak  
University of Wisconsin  
Madison, WI, USA  
*for contributions to statistical signal and image processing*

Kevin D. O'Grady  
The University of York  
York, UK  
*for contributions to magnetic measurement techniques applied to information storage systems*

Fumio Okano  
NHK ( Japan Broadcasting Corporation)  
Tokyo, Japan  
*for contributions to high resolution three-dimensional television*

Yasuhisa Omura  
Kansai University  
Suita, Osaka, Japan  
*for contributions of silicon on insulator devices technology, analysis, and modeling*

Umit Ozguner  
Ohio State University  
Columbus, OH, USA  
*for contributions to the development of intelligent autonomous vehicles*



Mario J. Paniccia  
Intel  
Santa Clara, CA, USA  
*for contributions to silicon photonic integrated circuits*

Giuseppe Parise  
University of Rome "La Sapienza"  
Rome, Italy  
*for contributions to workplace safety through analysis of power system switching procedures*

Lynne E. Parker  
University of Tennessee  
Knoxville, TN, USA  
*for contributions to distributed and heterogeneous multi-robot systems*

Gary L. Patton  
IBM  
Hopewell Junction, NY, USA  
*for contributions to silicon germanium heterojunction bipolar transistors*

Ronald John Patton  
Hull University  
Hull, East Yorkshire, UK  
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