## 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 Marie 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 Nantechnology 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 modeling 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

Kuochu 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 Commisso
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
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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
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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
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Pasadena, CA, USA
for leadership in understanding of the Earth system through observations from space

Long-Sheng Fan
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San Jose, CA, USA
for contributions to Micro Electro-Mechanical Systems

Ian Thomas Ferguson
Georgia Institute of Technology
Atlanta, GA, USA
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
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for contributions to pattern recognition and computer vision

Daniel R. Fuhrmann
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for contributions to adaptive radar signal processing

Lixin Gao University of Massachusetts Amherst Amherst, MA, USA for contributions to inter-domain internet protocol network routing

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

Yogesh B. Gianchandani
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Ann Arbor, MI, USA
for contributions to silicon-based microactuators and on-chip microplasmas

Gennady Gildenblat
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for contributions to modeling of metal-oxide semiconductor field effect transistors

Marc Hillel Goldburg 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
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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 modeling and rendering in computer graphics

Ali Hajimiri
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for development of high-speed silicon integrated-circuit oscillators, power amplifiers, and phased arrays

Hiroyuki Hama Mitsubishi Electric Corporation Amagasaki, Hyogo, Japan for contributions to compact and reliable high-voltage equipment

Baher Haroun
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for development of submicron digital complementary metal-oxide semiconductor for wireless systemson-chip

Richard Alan Hartlein
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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, Zhejing, 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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for application of new material in the field of electromagnetic compatibility

Masashi Horiguchi Renesas Technology Corp. Kodaira-shi, Tokyo, Japan for contributions to circuit technologies for high-density low-power memories

Bedrich Jaroslav Hosticka
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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
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for contributions to terahertz (THz) quantum-cascade lasers and applications

John Impagliazzo
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for contributions to computing education

Yannis Ioannidis
University of Athens
Athens, Greece
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
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for leadership in bioengineering education

David R. Kaeli
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for contributions to profile-guided optimization algorithms and dynamic branch prediction designs

Andrew B. Kahng
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for contributions to the design for manufacturability of integrated circuits, and the technology roadmap
of semiconductors

Shivkumar Kalyanaraman
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for contributions to traffic management in computer communication networks

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

Yoshio Karasawa
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for contributions to the measurement and modeling of propagation effects in radio communication
systems

Mohammad A. Karim
Old Dominion University
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for leadership in engineering education through creation of interdisciplinary programs

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

Nikola Kirilov Kasabov Auckland University of Technology Auckland, Auckland, New Zealand for the applications of neural networks and hybrid systems in computational intelligence

David Clark Keezer Georgia Institute of Technology Atlanta, GA, USA for contributions to high-speed digital test technology

Takamaro Kikkawa Hiroshima University 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
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for contributions to neural and fuzzy systems

Shiban Koul Koul
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for contributions to analysis and design of microwave and millimeter wave components and circuits

Gerhard Guenter Theodor Kramer
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for contributions to coded modulation, iterative decoding, and cooperative communications

Uwe Erich Kraus
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for contributions to digital television signal compression and transmission

Marwan Krunz
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for contributions to resource management policies in wireless networks

Jun-ichi Kushibiki Tohoku University Sendai, Miyagi, Japan for contributions to ultrasonic metrology and acoustic microscopy

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for development and space-qualified insertion of millimeter-wave transistor and integrated-circuit technologies

Andrew Francis Laine
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for contributions to wavelet applications in digital mammography, and ultrasound image analysis

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

Michael Arthur Laughton
Queen Mary University of London
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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 Lausanne, Switzerland for contributions to reliability and design techniques for integrated circuits and systems

Chang-Hee Lee
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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
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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
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for contributions to iterative signal processing, multi-user detection and concatenated error control
codes

Wanjiun Liao National Taiwan University Taipei, Taiwan 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
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for contributions to broadband semiconductor optical devices

Chih-Min (Jimmy) Lin
Yuan Ze University
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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 Irvine, CA, USA 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
Evanston, IL, USA
for contributions to bio-inspired and polymer micro electro-mechanical systems

John C.S. Lui
The Chinese University of Hong Kong
Shatin NT, Hong Kong, China
for contributions to performance modeling and analysis of storage communication systems and peer-topeer networks

Stan Lumish
Red Bank, NJ, USA
for leadership in the development and implementation of commercial terrestrial lightwave systems

Kevin Michael Lynch Northwestern University Evanston, IL, USA 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
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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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for contributions to testing of digital logic circuits

Mark Thomas Maybury
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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
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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
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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
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for contributions to elliptic curve cryptography

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

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

Kaizad Rumy Mistry
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Hillsboro, OR, USA
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
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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 Amherst, MA, USA 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
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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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for contributions to optical switching technologies for telecommunication networks

Kwok Kwok Ng Semiconductor Research Corp (SRC) Durham, NC, USA

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

Willie W. Ng HRL Laboratories LLC Malibu, CA, USA

for the application of photonic technologies to microwave antenna systems and ultra-wideband signal processing

Aria Nosratinia University of Texas at Dallas 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
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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
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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
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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
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for contributions to silicon germanium heterojunction bipolar transistors

Ronald John Patton Hull University Hull, East Yorkshire, UK for contributions to robust fault diagnosis and fault-tolerant control

Nicholas G. Paulter National Institute of Standards and Technology Gaithersburg, MD, USA for contributions to ultra-high speed waveform measurements

Mario Veiga Pereira
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for application of multi-stage stochastic optimization to power system operation and planning

Harry G. Perros North Carolina State University Raleigh, NC, USA for contributions to performance evaluation modeling of computer networks Larry Peterson
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for contributions to the design, implementation, and deployment of networked software systems

Jonathon P. Phillips
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for contributions to the evolution of face recognition techniques

Roberto Pieraccini SpeechCycle Inc. New York, NY, USA

for contributions to statistical natural language understanding and spoken dialog management and learning

Keshav Pingali University of Texas at Austin Austin, TX, USA for contributions to compilers and parallel computing

Pouyan Pourbeik Electric Power Research Institute Durham, NC, USA for contributions to modeling of power generation and transmission equipment

Rich Stephen Prodan
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for contributions to optical and wireless network architectures and protocols

Zhihua Qu University of Central Florida Orlando, FL, USA for contributions to control for nonlinear uncertain systems Long Quan
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for contributions to three-dimensional computer vision

Farhad Rachidi
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Lausanne, Switzerland
for contributions to electromagnetic modeling of lightning and coupling to transmission lines

Anand Raghunathan
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West Lafayette, IN, USA
for contributions to the design of low-power and secure systems on chip

Alevoor Ravishankar Rao
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Yorktown Heights, NY, USA
for contributions to understanding of image texture and applications to machine vision solutions

Ramesh Rao University of California San Diego La Jolla, CA, USA for leadership in wireless communications

Al Narasimha Reddy Texas A&M University College Station, TX, USA for contributions to multimedia storage and network support

Fan Ren
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for contributions to processing technologies for compound semiconductor devices

Douglas A. Reynolds
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for contributions to Gaussian-mixture-model techniques for automatic speaker recognition

Giuseppe Riccardi
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for contributions to algorithms for automatic speech recognition and spoken language processing

Douglas James Riley
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for contributions to time-domain techniques in computational electromagnetics

Ahmadreza Rofougaran
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for contributions to single chip system integration of radio frequency complementary metal-oxide
semiconductor technology

John Ashley Rogers
University of Illinois at Urbana/Champaign
Urbana, IL, USA
for contributions to nanomaterials and nanofabrication techniques for electronic and photonic devices

Maev Grigoryevich Roman University of Windsor Windsor, ON, Canada for contributions to high-resolution imaging, acoustic microscopy, and advanced material characterization

Thomas Roser
Brookhaven National Laboratory
Upton, NY, USA
for contributions to the design of magnets in particle accelerator applications

Richard C. Ruby
Avago Technologies
San Jose, CA, USA
for contributions to film bulk acoustic resonators, filters, and duplexers for mobile phones

Yong Rui Microsoft China Research and Development Beijing, China for contributions to image and video analysis, indexing and retrieval Daniela Lucia Rus
Massachusetts Institute of Technology
Cambridge, MA, USA
for contributions to distributed and modular robotics

Leslie Ann Rusch Université Laval Quebec, QC, Canada for contributions in optical and wireless communications systems

Seth Robert Sanders
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Berkeley, CA, USA
for contributions to integrated passive component technology and digital control of power electronic systems

Timothy David Sands
Purdue University
West Lafayette, IN, USA
for contributions to metal/semiconductor interfaces and heterogeneous integration

Jafar Saniie
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for contributions to ultrasonic signal detection, estimation and imaging

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for contributions to advanced materials in electromagnetic compatibility applications

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for contributions to radar remote sensing technologies in environmental and humanitarian applications

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for contributions to iterative demodulation and decoding in wireless communication

Robert Schober University of British Columbia (UBC) Vancouver, BC, Canada for contributions to wireless communications

Dan Schonfeld University of Illinois at Chicago Glenview, IL, USA for contributions to image and video analysis

Michael L. Scott University of Rochester Rochester, NY, USA for contributions to parallel and distributed computing

Abdel A. Sebak Concordia University Montreal, QC, Canada for contributions to electromagnetics scattering, and design and modeling of antennas

Timoleon K. Sellis
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Zografou, Attica, Greece
for contributions to database query optimization, and spatial data management

Rodolphe Sepulchre Université de Liège Liège Sart-Tilman, Belgium for contributions to nonlinear systems

Vladimir M. Shalaev Purdue University West Lafayette, IN, USA for contributions to nanophotonics and the development of optical materials Mark Alan Shayman
University of Maryland
College Park, MD, USA
for contributions to the theory of Riccati equations and discrete-event dynamic systems

Jose Silva
Texas A&M University
College Station, TX, USA
for contributions to Complimentary Metal-Oxide Semiconductor transconductance amplifiers and continuous-time filters

Andrew C. Singer
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for contributions to signal processing techniques for digital communication

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Indian Institute of Technology, Delhi
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