2022 NEWLY ELEVATED FELLOWS

Dr. Amin Abbosh
Brisbane, Queensland Australia

for contributions to electromagnetic medical imaging

Dr. Daniel Abramovitch
Palo Alto, CA USA

for contributions to the development of algorithms for control of mechatronic systems

Prof. Behcet Acikmese
Seattle, WA USA

for contributions to optimization-based nonlinear control and to planetary landing systems

Bo Ai
Beijing, China

for contributions to channel modeling and wireless communications in high-speed railways

Prof. Maruthi Akella
Austin, TX USA

for contributions to spacecraft control systems

Prof. J. Marcos Alonso
Gijon, Asturias, Spain

for contributions to power electronics in lighting applications
Prof. Ghassan Alregib
Atlanta, GA USA

for contributions to perception-based and context-based visual signal processing

Prof. Lay-Kee Ang
Singapore, Singapore

for contributions to electron emission and space charge effects in nanodiode and quantum materials

Murali Annavaram
Los Angeles, CA USA

for contributions to heterogeneous architectures for energy-efficient computing systems

Prof. Grigoris Antoniou
Huddersfield, United Kingdom

for contributions to knowledge representation within artificial intelligence and to the semantic web

Shoko Araki
Kyoto, Japan

for contributions to blind source separation of noisy and reverberant speech signals

Prof. Harry Asada
Cambridge, MA USA

for the design, modeling, and control of direct drive robotic arms

Kemal Aygun
Tempe, AZ USA

for contributions to high-bandwidth and high-speed packaging and socket technologies
Rajapandian Ayyanar  
Tempe, AZ USA

*for contributions to power conversion and grid integration of renewable resources*

Arturo Azcorra  
Leganes, Madrid, Spain

*for leadership in developing the midhaul and core of 5G networks*

Toshihiko Baba  
Yokohama, Japan

*for contributions to photonic nanostructure waveguides and emitters*

Dr. Michiel Bacchiani  
Tokyo, Japan

*for leadership in commercial automatic speech recognition systems*

Prof. Thomas Baeck  
Waltrop, Germany

*for contributions in synthesizing evolutionary computation*

Prof. Ruth Bahar  
Providence, RI USA

*for contributions to modeling and design of power-aware and noise-tolerant nanoscale computing systems*

Prof. Dominique Baillargeat  
Limoges, Limousin, France

*for contributions to developments of nanomaterials for RF packaging and sensors*
Dr. Anirban Bandyopadhyay
Pleasanton, CA USA

for leadership in silicon RF-SOI technologies

Sujata Banerjee
Palo Alto, CA USA

for leadership in programmable and energy efficient networks

Prof. Suman Banerjee
Madison, WI USA

for development of tools to improve performance and usability of wireless systems

Prof. Seth Bank
Austin, TX USA

for contributions to the growth of optoelectronic materials by molecular beam epitaxy

Cullen Bash
Los Gatos, CA USA

for contributions to improving the sustainability and energy efficiency of data center infrastructure

Prof. Stephen Beeby
Southampton, Hampshire, United Kingdom

for contributions to energy harvesting and its application in e-textiles

Boualem Benatallah
Kensington, New South Wales, Australia

for contributions to declarative service composition and web services middleware
Suparna Bhattacharya
Bangalore, Karnataka, India

*for contributions to Linux kernel for enterprise and advanced data processing systems*

Dr. Subhashish Bhattacharya
Raleigh, NC USA

*for contributions to power conversion systems and active power filters*

Prof. Tianshu Bi
Beijing, China

*for contributions to synchrophasor technology and protective relay applications*

Dr. Stephan Biller
Chapel Hill, NC USA

*for leadership in the applications of Internet of Things and Artificial Intelligence in manufacturing industry*

Prof. Emil Bjornson
Kista, Stockholm, Sweden

*for contributions to multi-antenna and multi-cell wireless communications*

Dr. M Brian Blake
Washington, DC USA

*for contributions to web-based software engineering*
Dr. Laure Blanc-feraud  
Sophia Antipolis, Cedex, France

_for contributions to inverse problems in image processing_

Dr. Petros Boufounos  
Winchester, MA USA

_for contributions to compressed sensing_

James Buckwalter  
Santa Barbara, CA USA

_for contributions to high-efficiency millimeter-wave power amplifiers and optical transceivers in SOI technologies_

Dr. Humberto Bustince  
Pamplona, Navarra, Spain

_for contributions to information fusion under uncertainty_

Prof. Darwin Caldwell  
Bury, United Kingdom

_for contributions to Actuator Technology, Legged Systems and Soft Human Friendly Robotic_

Prof. Erik Cambria  
Singapore, Singapore

_for contributions to affective computing and sentiment analysis_

Prof. Ming Cao  
Groningen, Netherlands

_for contributions to multi-agent control systems for sensor, robotic and social networks_
Anita Carleton
Sewickley, PA USA

for leadership in the advancement of software measurement and practices

Prof. Joao Paulo Catalao
Tortosendo, Portugal

for contributions to power system operations and demand response

Dr. Andrea Cavallini
Bologna, Italy

for contributions to the development of electrical insulation diagnostics through partial discharge measurements

Dr. Nacer Chahat
Altadena, CA USA

for development of CubeSat and Spacecraft antennas for inter-planetary missions

Prof. Samarjit Chakraborty
Chapel Hill, NC USA

for contributions to system-level timing analysis of cyber-physical systems

Prof. Anthony Chan Carusone
Toronto, ON Canada

for contributions to integrated circuits for digital communication
Prof. Nitesh Chawla
Notre Dame, IN USA

for contributions to learning from imbalanced data and heterogeneous graphs
Prof. Wenquan Che
Guangzhou, Guangdong, China

*for contributions to planar transmission line structures for microwave passive components*

Dr. Jinjun Chen
Melbourne, Victoria, Australia

*for contributions to scalable architecture for cloud data storage and processing*

Prof. Minghua Chen
Kowloon Tong, Hong Kong

*for contributions to delay-critical networked systems*

Dr. Baoxing Chen
Westford, MA USA

*for contributions to integrated signal-power isolation and integrated magnetics*

Dr. Zhihong Chen
West Lafayette, IN USA

*for contributions to the understanding and applications of low-dimensional nanomaterials*

Prof. Hongsheng Chen
Hangzhou, Zhejiang, China

*for contributions to electromagnetic metamaterial and invisibility cloak*

Prof. Xinkai Chen
Saitama, Saitama, Japan

*for contributions to nonlinear adaptive control and nonlinear observer design for mechatronic systems*
Prof. Xiang Cheng
Beijing, China

for contributions to vehicular communication channel modeling and system design

Prof. Alessandro Chiuso
Padova, Padua, Italy

for contributions to subspace and Bayesian identification methods

Dr. Thomas Cho
Seongnam-Si, Gyeonggi-do, South Korea

for leadership and contributions in CMOS RFIC design and commercialization of wireless mobile systems

Prof. Ki Chon
Storrs, CT USA

for the development of novel algorithms to detect atrial fibrillation from smart wearable devices

Chee-Yee Chong
Los Altos, CA USA

for contributions to information fusion methods for multi-sensor tracking

Dr. Thomas Clancy
Arlington, VA USA

for leadership in security and wireless communications
Prof. Holger Claussen
Maynooth, Kildare, Ireland

for contributions to small cell wireless network technology

Walter Cleaveland
Arlington, VA USA

for contributions to verification tools for finite-state and cyber-physical systems

Prof. Bruno Clerckx
London, United Kingdom

for contributions to multi-antenna communications and wireless power transmission

Todd Coleman
La Jolla, CA USA

for contributions to biomedical signal processing and leadership in neuro-engineering

Sinem Coleri
Sariyer, Istanbul, Turkey

for contributions to wireless technologies and sensor networks

Prof. Andrea Conti
Ferrara, Italy

for contributions to wireless communication and localization systems

Mauro Conti
Montecastrilli, Terni, Italy

for contributions to communications network security
Prof. Alessandra Costanzo  
Bologna, Italy  

*for contributions to nonlinear electromagnetic co-design of RF and microwave circuits*

Linglong Dai  
Beijing, China  

*for contributions to massive MIMO*

Prof. Luca Daniel  
Cambridge, MA USA  

*for contributions to modeling and simulation of electronic systems*

Paul Dayton  
Chapel Hill, NC USA  

*for contributions to contrast agents and contrast-enhanced ultrasound in medical diagnostics and therapeutics*

Dr. Riccardo Degaudenzi  
Den Haag, Zuid-Holland, Netherlands  

*for leadership in digital communication standards for satellite communications*

F. Degertekin  
Atlanta, GA USA  

*for contributions to micromachined ultrasonic and optomechanical transducers and systems*

Dr. Fang Deng  
Novi, MI USA  

*for contributions to permanent magnet drive design and control methodology*
Massimiliano Di Ventra
La Jolla, CA USA

*for contributions to quantum transport in nanoscale systems and in-memory computing*

Prof. Alexandros G. Dimakis
Austin, TX USA

*for contributions to distributed coding and learning*

Sorin Draghici
Ann Arbor, MI USA

*for contributions to the analysis of high-throughput genomics and proteomics data*

Donald Dunn
Highlands, TX USA

*for contributions to process control systems*

Dr. Trung Q. Duong
Belfast, United Kingdom

*for contributions to cooperative communications and physical layer security*

Prof. Tarek El-bawab
Boston, MA USA

*for contributions to the definition, recognition, accreditation criteria, and program development of modern network-engineering education*

R. Scott Erwin
Albuquerque, NM USA

*for leadership and contributions to the development, implementation and on-orbit demonstration of spacecraft control technologies*
Dr. Carol Espy-wilson  
College Park, MD USA  

_for contributions to speech enhancement and recognition_  

Dr. Sonia Fahmy  
West Lafayette, IN USA  

_for contributions to design and evaluation of network protocols and sensor networks_  

Lingling Fan  
Tampa, FL USA  

_for contributions to stability analysis and control of inverter-based resources_  

Prof. Martin Farach-Colton  
New York, NY USA  

_for contributions to data structures for storage systems_  

Junlan Feng  
Beijing, China  

_for leadership in spoken dialog applications, AI platform, and network intelligence_  

Dr. Bonnie Ferri  
Atlanta, GA USA  

_for contributions to hands-on learning and leadership in higher education_  
Prof. Cedric Fevotte  
Toulouse, Midi-Pyrenees, France  

_for contributions to nonnegative matrix factorization, source separation, and spectral unmixing_
Dr. Alessandro Foi
Tampere, Finland

for contributions to image restoration and noise modeling

Prof. Giancarlo Fortino
Rende, Italy

for contributions to Engineering of IoT-enabled Wearable Computing Systems

Prof. Eric Fosler-lussier
Columbus, OH USA

for contributions to spoken language technology by integrating linguistic models with machine learning

Daniel Friedman
Yorktown Heights, NY USA

for contributions to RFID and phase-lock-loop systems

Prof. Xiaoming Fu
Goettingen, Niedersachsen, Germany

for contributions to resource management in edge computing and networking

Ibrahim Gedeon
Edmonton, AB Canada

for leadership in consumer-oriented applications of broadband communications

Apostolos Georgiadis
The Hague, Zuid-Holland, Netherlands

for contributions to designs of RF energy harvesting circuits
Dr. Tobias Geyer
Ennetbaden, Aargau, Switzerland

for contributions to control and modulation of high-power converters

Simon Godsill
Cambridge, United Kingdom

for contributions to statistical signal processing for tracking and audio restoration

Dr. Nada Golmie
Gaithersburg, MD USA

for contributions to wireless technologies and standards

Prof. Albert Guillen I Fabregas
Cambridge, United Kingdom

for contributions to the analysis and design of wireless communication systems

Deniz Gunduz
Reading, Reading, United Kingdom

for contributions to the foundations of source-channel coding, cooperative and cache-aided communications

Dr. Chuanxiong Guo
Bellevue, WA USA

for contributions to design of data center networking

Prof. Puneet Gupta
Los Angeles, CA USA

for contributions to the design and co-optimization of integrated circuits
Vijay Gupta
Notre Dame, IN USA

for contributions to networked and cyber-physical systems

Prof. Edmundo Gutierrez-d.
Tonantzintla, Puebla, Mexico

for contributions to education and infrastructure in the field of electron devices in Latin America

Prof. Junwei Han
Xi'an, China

for contributions to visual saliency detection and image understanding

Prof. Gerhard Hancke
Kowloon, Hong Kong

for contributions to secure and resilient wireless technology for the Industrial Internet-of-Things

Tony Heinz
Stanford, CA USA

for contributions to spectroscopic techniques, nanophotonics, and optical nanomaterials

Jeffrey Hesler
Charlottesville, VA USA

for contributions to development of terahertz components and instrumentation

Prof. Daniel Hissel
Ronchamp, France

for contributions to the development of hydrogen-energy systems and their industrial applications
Torsten Hoefler
Pfaeffikon, Switzerland

for contributions to large-scale parallel processing systems and supercomputers

Prof. Heath Hofmann
Ann Arbor, MI USA

for contributions to electric machinery and drive systems

Dr. David Horsley
Davis, CA USA

for development of micro-electromechanical systems for ultrasonic transduction

Dr. Steve Hranilovic
Hamilton, ON Canada

for contributions to optical wireless communication systems

Sun-Yuan Hsieh
Tainan, Taiwan

for contributions to fault-tolerance for internet and cloud computing

Guohan Hu
Yorktown Heights, NY USA

for contributions to Spin-Transfer-Torque MRAM materials and devices
Qi Huang
Chengdu, Sichuan, China

for leadership in informatics for smart electric energy system
Prof. Jin Hur  
Incheon, South Korea

for contributions to design of permanent magnet synchronous motors

Prof. Ihab Ilyas  
Waterloo, ON Canada

for contributions to data integration, data cleaning and rank-aware query processing

Prof. Tommaso Isernia  
Reggio Calabria, Italy

for contributions on antennas synthesis and inverse scattering problems

Dr. Mahesh Iyer  
Fremont, CA USA

for leadership in ASIC and FPGA Electronic Design Automation

Prof. Mathews Jacob  
Iowa City, IA USA

for contributions to computational biomedical imaging

Prof. Tseng King Jet  
Singapore, Singapore

for contributions to permanent magnet machines and distributed energy resources

Dr. Jack Jewell  
Boulder, CO USA

for development of vertical-cavity surface-emitting lasers
Prof. Yusheng Ji
Tokyo, Japan

for contribution to distributed computing in mobile and dynamic systems

Prof. Jian Xun Jin
Tianjin, China

for development of operational high-temperature superconducting power devices

Prof. Admela Jukan
Braunschweig, Germany

for contributions to optical communications and networking

Prof. Murat Kantarcioğlu
Richardson, TX USA

for contributions to data management and analytics

Prof. Soummya Kar
Pittsburgh, PA USA

for contributions to distributed signal processing

Stamatis Karnouskos
Berlin, Germany

for leadership in industrial cyber-physical systems and smart grids

Prof. Hideki Kawahara
Ikoma, Nara Japan

for contributions to auditory-inspired speech signal processing and science
Prof. Kevin Kelly
Houston, TX USA

*for contributions to compressive imaging*

Prof. Andrew Kent
New York, NY USA

*for contributions to the application of spin-transfer torques in nano-scale devices*

Prof. Vinod Khadkikar
Abu Dhabi, United Arab Emirates

*for contributions to power quality solutions*

Prof. Latifur Khan
Plano, TX USA

*for contributions to stream analytics and ontology for big data*

Prof. Aberrahmane Kheddar
Tsukuba, Japan

*for contributions to robotic haptics and humanoids*

Robert Killey
London, United Kingdom

*for contributions to digital signal processing for high-speed, nonlinear optical communications systems*

Prof. Chul-Hwan Kim
Suwon, Gyeonggi-do, South Korea

*for contribution to protective relaying methods to reduce power system outages*
Dr. Jin-Woo Kim
Fayetteville, AR USA

for contributions to nanoscale fabrication of bio/nano-hybrid materials

William King
Urbana, IL USA

for contributions to nano-scale measurements and nano-manufacturing

Dr. John Kitching
Boulder, CO USA

for contribution to Chip-Scale Atomic Clock and Atomic Magnetometer

Prof. Elisa Konofagou
New York, NY USA

for contributions to ultrasound for cardiovascular and cancer diagnosis, neuromodulation and brain drug delivery

Dr. Slawomir Koziel
Reykjavik, Iceland

for contributions to modeling and optimization of microwave devices and circuits

Dr. Hariharan Krishnan
Troy, MI USA

for contributions to connected vehicle safety systems

Dr. Katherine Kuchenbecker
Stuttgart, Baden-Wuerttemberg, Germany

for contributions to interactive haptic systems and robotic touch perception
Dr. Sarah Kurtz  
Merced, CA USA  

for contributions to photovoltaic devices and systems reliability

Ioannis Kymissis  
New York, NY USA  

for contributions to thin-film electronics for displays and sensors

Michael Langberg  
Buffalo, NY USA  

for contributions to the theory and practice of network coding

Prof. Buon Kiong Lau  
Lund, Sweden  

for contributions to multi-antenna systems in wireless communications

Kang-Won Lee  
Seoul, South Korea  

for contribution to development of SDN and virtualization technologies for 5G wireless networks

Prof. AMIR Leshem  
Ramat-Gan, Israel  

for contributions to multi-channel and multi-agent signal processing

Dr. Yves Letraon  
Luxembourg, Luxembourg  

for contribution to software analysis and testing
Dr. Feifei Li
Salt Lake City, UT USA

_for contributions to database query processing and optimization, and to cloud database systems_

Qing Li
Kowloon, Hong Kong

_for contributions to machine learning in multimedia, data mining and data warehousing_

Prof. Zhijun Li
Shanghai, Shanghai China

_for contributions to control systems for wearable robotics and bio-mechatronics_

Prof. Keqiu Li
Tianjin, China

_for contributions to resource-efficient and QoS-oriented cloud computing_

Youfu Li
Kowloon, Hong Kong

_for contributions to active visual sensing_

Prof. Yingbin Liang
Dublin, OH USA

_for contributions to information theoretic methods for wireless systems_

Prof. Shih-Chii Liu
Zurich, Switzerland

_for contributions to neuromorphic engineering_
Prof. Tian-Hua Liu
Taipei, Taiwan

for contributions to sensorless control for AC drives

Ping Liu
Arlington, TX USA

for contributions to permanent magnet research and magnetic nanoparticle synthesis and characterization

Shan Liu
San Jose, CA USA

for leadership in multimedia and multicore processors

Prof. David Lo
Singapore, Singapore

for contributions to software analytics

Dr. Hang-Ting Lue
Hsinchu, Taiwan

for contributions to charge-trapping memories and 3D NOR flash

Prof. Robyn Lutz
Ames, IA USA

for contributions to software requirements for safety-critical systems

Prof. Siwei Lyu
Buffalo, NY USA

for contributions to digital media forensic technologies
Trevor Maguire
Winnipeg, MB Canada

for Leadership in the Development of Large Scale Real-Time Power Systems Simulators

Roland Malhame
Montreal, QC Canada

for contributions to mean-field games and stochastic hybrid systems

Dr. Shie Mannor
Haifa, Israel

for contributions to reinforcement learning and decision-making under uncertainty

Prof. Zhuoqing Mao
Ann Arbor, MI USA

for contributions to performance and security of internet routing and mobile systems

Prof. Ignacio Matias
Pamplona, Navarra, Spain

for contributions to photonic sensor research and transference to industry

Prof. Saad Mekhilef
Kuala Lumpur, Malaysia

for contributions to control methods for photovoltaic systems and multi-level inverters

Dr. Igor Mezic
Santa Barbara, CA USA

for contributions to modeling and control using Koopman operator techniques
Dr. Zetian Mi
Ann Arbor, MI USA

for contributions to III-nitride photonics and clean energy

Prof. Silvestro Micera
Lausanne, Switzerland

for contributions to restoration of human sensorimotor functions using engineered neuroprostheses

Prof. Sudip Misra
Kharagpur, West Bengal, India

for contributions to intelligent sensing in constrained IoT environments

Dr. Moriyasu Miyazaki
Sagamihara City, Kanagawa, Japan

for leadership in developments of airborne active-phased-array radars and satellite communication microwave subsystems

Dr. Hiroyuki Mizuno
Kokubunji, Tokyo, Japan

for contributions to leakage current reduction in integrated circuits

Dr. Apurva Mody
Chelmsford, MA USA

for leadership in cognitive dynamic spectrum sharing and standards
Dr. Webert Montlouis  
Columbia, MD USA  

*for leadership in the development of radar systems*  

Prof. Masato Motomura  
Yokohama, Kanagawa, Japan  

*for contributions to memory-logic integration of reconfigurable chip architecture*  

Dr. Debargha Mukherjee  
Mountain View, CA USA  

*for leadership in standard development for video-streaming industry*  

Prof. Vittorio Murino  
Genova, Italy  

*for contributions to signal processing for behavior analysis*  

Dr. Mukesh Nagpal  
Burnaby, BC Canada  

*for contributions to economic and safe integration of distributed renewables in electric utility networks*  

Prof. Babak Nahid-Mobarakeh  
Hamilton, ON Canada  

*for contributions to service continuity of electric motor drive systems*  

Dr. Sae Woo Nam  
Boulder, CO USA  

*for pioneering development of superconducting single-photon detectors with applications to quantum communications and quantum computing*
Prof. Abdolhosein Nasiri
Milwaukee, WI USA

*for contributions to high power converters for energy storage systems and microgrids*

Dr. Isaac Nassi
Los Gatos, CA USA

*for leadership in parallel and distributed systems and adaptive systems*

Prof. Nassir Navab
Garching, Bayern, Germany

*for contributions to augmented reality in medicine and computer-assisted interventions*

Dr. Krishna Nayak
Long Beach, CA USA

*for contributions to real-time magnetic resonance imaging of the human heart and vocal tract airway*

Jerald Nespor
Moorestown, NJ USA

*for contributions to Digital AESA Radar Systems*

Philip Neudeck
Cleveland, OH USA

*for contributions to silicon carbide electronics and crystal growth*
Dr. Nathan Newbury  
Boulder, CO USA

*for contributions to optical frequency comb metrology*

Prof. Sam Noh  
Ulsan, South Korea

*for contributions to storage system software for flash and nonvolatile memory*

Dr. Yoshihiro Ohba  
Kawasaki, Kanagawa, Japan

*for contributions to standardization of network security protocols*

Prof. Mario Paolone  
Lausanne, Vaud, Switzerland

*for contributions to situational-awareness and control of power distribution systems*

Dr. Sung Ik Park  
Daejeon, South Korea

*for contributions to physical layer development of broadcast systems*

Prof. Gianmario Pellegrino  
Torino, Italy

*for contributions to Synchronous Reluctance machines identification and control*
Dr. Thomas Penzel
Berlin, Germany

for contributions to biosignal analysis for sleep medicine

Prof. Adrian Perrig
Zurich, Switzerland

for contributions to network and system security

Dr. Anh-Vu Pham
Davis, CA USA

for contribution to organic packaging technologies

Gopal Pingali
Bengaluru, Karnataka, India

for contributions to hybrid cloud computing and real-time multimedia systems

Prof. Joyce Poon
Toronto, ON Canada

for contributions to integrated photonics on silicon and resonant microphotonic devices

Prof. Eric Pop
Stanford, CA USA

for contributions to phase-change memory

Prof. Marjan Popov
Delft, Netherlands

for contributions to high-frequency transformer and circuit breaker modeling
Christophe Prieur
Grenoble, France

_for contribution to nonlinear control systems_

Prof. GuoJun Qi
Bellevue, WA USA

_for contributions to multimedia analysis and applications_

Rajesh Rajamani
Saint Paul, MN USA

_for contributions to vehicle control in intelligent transportation systems_

Satish Ranade
Las Cruces, NM USA

_for contributions to integration of renewable and distributed energy resources into power systems_

Dr. Clive Randall
University Park, PA USA

_for contributions to the formulation, processing, and characterization of electroceramics_

Prof. Arijit Raychowdhury
Atlanta, GA USA

_for contributions to energy-efficient adaptive integrated circuit design_

Prof. Daniel Razansky
Zurich, Switzerland

_for contributions to multispectral optoacoustic tomography_
Dr. Sorel Reisman
Newport Beach, CA USA

for leadership in design, implementation and adoption of open education resources

Dr. Christopher Rodenbeck
Annandale, VA USA

for contributions to radar microsystems for ultrawideband and millimeter-wave applications

Dr. Haisheng Rong
Santa Clara, CA USA

for contributions to silicon photonics devices

Prof. Thomas Runkler
Muenchen, Germany

for contributions to computational intelligence in clustering and control

Maryam Saeedifard
Atlanta, GA USA

for contributions to modulation, control and protection of multilevel converters for high-voltage DC transmission

Tara Sainath
Jersey City, NJ USA

for contributions to deep learning for automatic speech recognition

Prof. Ricardo Sanfelice
Santa Cruz, CA USA

for contributions to hybrid feedback control systems
Prof. Bulent Sarlioglu
Madison, WI USA

for applications of electrical drives in the aerospace industry

Mladen Sasic
Etobicoke, ON Canada

for contributions to development of diagnostics testing of motor and generator windings

Dr. Tadashi Sawata
Coventry, United Kingdom

for contributions to motor drive systems for more electric aircraft

Dr. Peter Seiler
Ann Arbor, MI USA

for contributions to robust control theory and computational tools

Dr. Bernhard Sendhoff
Offenbach/Main, Hessen, Germany

for contributions to evolutionary optimization and its engineering applications

Devavrat Shah
Cambridge, MA USA

for contributions to network and information science, inference and machine learning

Prof. Shiguang Shan
Haidian, Beijing, China

for contributions to visual signal processing and recognition
Prof. Heng Tao Shen  
Chengdu, Sichuan, China  

*for contributions to multimedia content understanding and retrieval*

Prof. Timothy Sherwood  
Santa Barbara, CA USA  

*for contributions to computer system security and performance analysis*

Steven Simske  
Fort Collins, CO USA  

*for contributions to anti-counterfeiting and cyber-physical security*

Dr. Hanumant Singh  
Boston, MA USA  

*for development of localization and mapping techniques and autonomous systems for marine and polar applications*

Dr. Brij Singh  
West Fargo, ND USA  

*for applications of electric drive to off-road vehicles*

Kumar Sivarajan  
Bangalore, India  

*for leadership in optical networking*  
Prof. Florian Solzbacher  
Salt Lake City, UT USA  

*for the development of tools enabling applied and translational neuroscience and neural engineering*
Dr. Narayan Srinivasa  
San Jose, CA USA

for contributions to neural network and neuromorphic computing architectures, circuits and algorithms

Dr. Anurag Srivastava  
Morgantown, WV USA

for contributions to electric grid resiliency

Prof. Thomas Stieglitz  
Freiburg, Germany

for contributions to flexible micromachined neural interfaces and microimplants

Dr. Mark Stiles  
Gaithersburg, MD USA

for contributions to spintronics devices and data storage

Dr. Ad Stoffelen  
De Bilt, Netherlands

for contributions to satellite wind measurement missions

Prof. S Sudarshan  
Mumbai, Maharashtra, India

for contributions to query processing and optimization in databases
Dr. Nobuyuki Sugii  
Tokyo, Japan  
*for contributions to fully depleted silicon-on-insulator technology*

Dr. Richard Tabors  
South Dartmouth, MA USA  
*for development of technologies for real-time locational pricing of electricity for efficient electric power markets*

Dr. Chuan Seng Tan  
Singapore, Singapore  
*for contributions to wafer bonding technology for 3D packaging and integration*

Prof. Juan Tardos  
Zaragoza, Spain  
*for contributions to simultaneous localization and mapping with visual sensors*

Daniel Tazartes  
West Hills, CA USA  
*for contributions to inertial sensors and navigation systems*

Dr. Kiyohisa Terai  
Yokohama, Kanagawa, Japan  
*for contribution to optical fiber sensors and electrical discharge applications*  
Rajeev Thakur  
Lemont, IL USA  
*for contributions to high-performance interfaces for scalable computing systems*
Prof. Yonghong Tian
Haidian, Beijing, China

_for contributions to knowledge-based visual data analysis_

Dr. Hanghang Tong
Champaign, IL USA

_for contributions to graph mining_

Gregg Trahey
Durham, NC USA

_for contributions to speckle tracking and acoustic radiation force impulse imaging in medical ultrasound_

Prof. Ivor Tsang
Sydney, New South Wales, Australia

_for contributions to large-scale machine learning and transfer learning_

Dr. Tetsuzo Ueda
Toyonaka-Shi, Osaka, Japan

_for contributions to III-V compound semiconductor technologies_

Shambhu Upadhyaya
Buffalo, NY USA

_for contributions to the mitigation of insider attacks and malware in cyberspace_
Elif Uysal
Ankara, Turkey

_for pioneering contributions to energy-efficient and low latency communications_
Dr. Mikhail Vaiman
Los Angeles, CA USA

for contributions to methods and software for real-time analysis and control of electric power systems

Pietro Valdastri
Leeds, United Kingdom

for contributions to medical capsule robots

Prof. Mikko Valkama
Tampere, Finland

for contributions to physical layer signal processing in radio systems

Prof. Daniel Van Der Weide
Madison, WI USA

for contributions to ultrafast terahertz electronics and biomedical applications of microwave technologies

Dr. Frank Van Diggelen
Carmel By The Sea, CA USA

for contributions to assisted global navigation satellite systems for consumer applications

Prof. Marten Van Dijk
Den Bosch, Netherlands

for contributions to secure processor design and encrypted computation
Prof. Mayank Vatsa
Jodhpur, Rajasthan, India

for contributions to secure biometric recognition

Ashok Veeraraghavan
Houston, TX USA

for contributions to computational photography and computer vision

Dr. Peter Vetter
Summit, NJ USA

for leadership in broadband access technologies in advanced passive optical networks

Dr. Emmanuel Vincent
Villers-les-Nancy, France

for contributions to audio source separation and challenge series methodology

Dr. Sriram Vishwantath
Austin, TX USA

for contributions to information theory and coding for wireless communication systems

Dr. Dimitris Visvikis
Nantes Cedex, France

for contributions to image reconstruction and analysis of positron emission tomography

Prof. Richard Voyles
West Lafayette, IN USA

for leadership in the implementation of programs that foster robotics research and the robotics community
Prof. Valeriy Vyatkin
Espoo, Finland

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Prof. Lei Wu  
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Prof. Cathy Wu  
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for contributions to computational biology and data science

Dr. Peter Wurman  
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for contributions to computational auction, multiagent systems and robotics

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for contributions to spatial data mining and recommendation systems

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Prof. Huili Helen Xing
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for contributions to GaN high-electron-mobility transistors

Prof. Li Xiong
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for contributions to privacy preserving and secure data sharing

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for contributions to resource allocation in cloud computing systems and wireless networks

Prof. Euisik Yoon  
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for contributions to distributed and networked control

Prof. Carl Zetterling
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for contributions to silicon carbide devices
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for contributions to the design of filtering antennas

Dr. Jun Zhang
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for contributions to dense wireless networks

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for contributions to non-orthogonal multiplexing technology in terrestrial broadcast and broadband systems
Prof. Guoying Zhao  
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for contributions to facial expression analysis and feature representation

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for contributions to machine learning for medical imaging

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