

2020 NEWLY ELEVATED FELLOWS

Hussein Abbass
Canberra, ACT, Australia

for contributions to evolutionary learning and optimization

Michael Abramoff
Iowa City, IA, U.S.A.

for contributions to the application of artificial intelligence methods in diabetic retinopathy

Paavo Alku
Espoo, Finland

for contributions to analysis, synthesis and quality improvement of speech signals

Jaume Anguera Pros
Catalunya, Spain

for contributions to small multiband antennas for wireless telecommunication devices

Alyssa Apsel
Ithaca, NY, U.S.A.

for contributions to radio frequency and optical communications circuits and systems

Jose Arroyo-Sanchez
Ciudad Real, Spain

for contributions to generation scheduling for electricity markets

Chadi Assi
Montreal, QC, Canada

for contributions to resource allocation for optical and wireless networks

Amir Avestimehr
Rancho Palos Verdes, CA, U.S.A.

for contributions to the analysis of communication and computation over wireless networks

2020 NEWLY ELEVATED FELLOWS

Hari Balakrishnan
Cambridge, MA, U.S.A.

for contributions to the design and application of mobile sensing systems

Andrew Bell
Leeds, UK

for contributions to piezoelectric science and engineering resulting in novel high temperature ultrasound transducers

Adel Belouchrani
EL Harrach, Algeria

for contributions to blind source separation and to non-stationary signal and array processing

Mohamed Benbouzid
Brest, France

for contributions to diagnosis and fault-tolerant control of electric machines and drives

Vaughn Betz
Toronto, ON, Canada

for contributions to computer-aided design of field-programmable gate arrays

William Bidermann
San Diego, CA, U.S.A.

for leadership in commercially successful image sensors and microprocessors

Aude Billard
Lausanne, Switzerland

for contributions to robot task learning and programming by human demonstration

Monica Blank
Palo Alto, CA, U.S.A.

for development of gyrotron oscillators and amplifiers

2020 NEWLY ELEVATED FELLOWS

Alexandra Boltasseva
West Lafayette, IN, U.S.A.

for research on new materials for plasmonic and metamaterial nanophotonic devices

Sukumar Brahma
Clemson, SC, U.S.A.

for contributions to power system protection with distributed and renewable generation

Geoffrey Burr
Cupertino, CA, U.S.A.

for contributions to neuromorphic computing using non-volatile memories

Lin Cai
Victoria, BC, Canada

for contributions to topology control of wireless networks

Filippo Capolino
Irvine, CA, U.S.A.

for contributions to development of electromagnetic phenomena in metamaterials and periodic structures

Walter Mark Carpenter
Irving, TX, U.S.A.

for leadership in standards development for power system protection

Ramon Carvajal
Sevilla, Spain

for contributions to low-voltage and low-power CMOS analog circuit design

Andrea Cavagnino
Torino, Italy

for contributions to multi-physics design and material characterization of electric machines

2020 NEWLY ELEVATED FELLOWS

Ranveer Chandra
Redmond, WA, U.S.A.

for contributions to software-defined wireless networking technologies

Ting-Chang Chang
Kaohsiung, Taiwan

for contributions to non-volatile memory and thin-film transistor technologies

William Chappell
Vienna, VA, U.S.A.

for leadership in the development of reconfigurable radio frequency and microwave systems

Baoquan Chen
Beijing, China

for contributions to spatial data visualization

George Chen
Southampton, UK

for contributions to space charge measurement and interpretation for dielectric performance improvements

Jiann-Fuh Chen
Tainan, Taiwan

for contributions to power electronics in sustainable energy and high power systems

Lei Chen
Hong Kong, Hong Kong

for contributions to time series management and spatial crowdsourcing

Shanzhi Chen
Beijing, China

for leadership in standardization of wireless mobile systems

2020 NEWLY ELEVATED FELLOWS

Wei Chen
Beijing, China

for contributions to algorithmic development for influence maximization in social networks

Xudong Chen
Singapore, Singapore

for contributions to optimization methods for electromagnetic inverse scattering

Yingying Chen
Holmdel, NJ, U.S.A.

for contributions to mobile computing and mobile security

Ka Wai Eric Cheng
Kowloon, Hong Kong

for contribution to electric vehicle technology and switched-capacitor power conversion

Sen-Ching Cheung
Lexington, KY, U.S.A.

for contributions to multimedia data processing and their applications in autism interventions

Chong-Yung Chi
Hsinchu, Taiwan

for contributions to convex analysis and optimization for blind source separation

Jung-Chih Chiao
Dallas, TX, U.S.A.

for contributions to wireless and battery-less medical implants

Pr Chidambaram
San Diego, CA, U.S.A.

for contributions to strain engineering in MOSFETs and to design-technology co-optimization

2020 NEWLY ELEVATED FELLOWS

Sangyeun Cho
Hwaseong-si, Korea

for leadership and contributions to solid-state drive architectures and systems

Wan Choi
Daejeon, Korea

for contributions to the analysis and design of multi-cell communication systems

Chion Chui
Hsinchu, Taiwan

for contributions to high-mobility germanium metal-oxide-semiconductor devices

Kukjin Chun
Seoul, Korea

for leadership in microelectromechanical systems technology development

Maciej Ciesielski
Amherst, MA, U.S.A.

for contributions to logic synthesis and formal verification of arithmetic circuits

Krzysztof Cios
Richmond, VA, U.S.A.

for contributions to data mining and machine learning

Christopher Clifton
West Lafayette, IN, U.S.A.

for contributions to privacy protection in data analysis

Carlos Cordeiro
Portland, OR, U.S.A.

for contributions to millimeter wave spectrum Wi-Fi radios

2020 NEWLY ELEVATED FELLOWS

Keith Corzine
Scotts Valley, CA, U.S.A.

for contributions to topology and control of multilevel converters

Thomas Crowe
Charlottesville, VA, U.S.A.

for leadership in the development of terahertz devices and instrumentation

Carolina Cruz-Neira
Little Rock, AR, U.S.A.

for contributions to virtual reality

Ravinder Dahiya
Glasgow, UK

for contributions to tactile sensing

Gautam Das
Arlington, TX, U.S.A.

for contributions to search and ranking in databases and deep web querying

Jack Davidson
Charlottesville, VA, U.S.A.

for contributions to compilers, computer security and computer science education

Jose de la Rosa
Sevilla, Spain

for contributions to delta-sigma modulators

Barbara De Salvo
Menlo Park, CA, U.S.A.

for contributions to device physics of nonvolatile embedded and stand-alone memories

2020 NEWLY ELEVATED FELLOWS

Venkata Raman Dinavahi
Edmonton, AB, Canada

for contributions to real-time simulation of power systems with embedded power electronic converters

Zhiguo Ding
Manchester, UK

for contributions to non-orthogonal multiple access and energy harvesting communication

Marco Di Renzo
Gif sur Yvette, France

for contributions to spatial modulation and to performance evaluation of wireless networks

Ivan Djordjevic
Tucson, AZ, U.S.A.

for contributions to physical-layer optical communications

Octavia Dobre
St. John's, NL, Canada

for contributions to the theory and practice of signal intelligence and emerging wireless technologies

Shlomi Dolev
Beer-Sheva, Israel

for contributions to distributed computing and self-stabilization

Liang Dong
Clemson, SC, U.S.A.

for contributions to the development of photosensitive optical fibers for fiber amplifiers

Xiaojiang Du
Philadelphia, PA, U.S.A.

for contributions to wireless security

2020 NEWLY ELEVATED FELLOWS

Ashutosh Dutta
Bridgewater, NJ, U.S.A.

for leadership in mobility management and security monitoring in mobile networks

Touradj Ebrahimi
Lausanne, Switzerland

for contributions to visual information representation and assessment of quality of experience in multimedia

Rudolf Eigenmann
Newark, DE, U.S.A.

for contributions to compilers for high-performance computing

Stanislav Emelianov
Atlanta, GA, U.S.A.

for contributions to ultrasound elasticity and photoacoustic imaging

Jerome Faist
Zurich, Switzerland

for contributions to quantum cascade lasers and infrared QCLs

Sina Farsiu
Durham, NC, U.S.A.

for contributions to multi-frame super resolution and ophthalmic image processing

Antonella Ferrara
Pavia, Italy

for contributions to sliding mode control theory

Ian Foster
Chicago, IL, U.S.A.

for contributions to grid computing and data transport infrastructures

2020 NEWLY ELEVATED FELLOWS

Edward Frank
Park City, UT, U.S.A.

for leadership in commercialization of wireless solutions for mobile computing and communications

Richard Fujimoto
Atlanta, GA, U.S.A.

for contributions to parallel and distributed discrete event simulation

Feifei Gao
Beijing, China

for contributions to channel estimation and signal processing for wireless communications

Andrea Garulli
Siena, Italy

for contributions to set membership identification and robust analysis of uncertain systems

Johannes Gehrke
Bellevue, WA, U.S.A.

for contributions to data mining and data management systems

Kurt Gibble
University Park, PA, U.S.A.

for contributions to improving the accuracy of atomic fountain clocks

Sonja Glavaski
Potomac, MD, U.S.A.

for leadership in energy systems

Edward Godshalk
Newberg, OR, U.S.A.

for development of microwave on-wafer probing and measurement techniques

2020 NEWLY ELEVATED FELLOWS

Kristen Grauman
Austin, TX, U.S.A.

for contributions to computer vision for visual recognition and search

Guofei Gu
College Station, TX, U.S.A.

for contributions to malware detection and security of next generation networks

Song Guo
Kowloon, Hong Kong

for contributions to high performance and resilient distributed computing

Yifan Guo
Irvine, CA, U.S.A.

for leadership in interconnect technologies for electronics packaging and reliability analysis

Mool Gupta
Keswick, VA, U.S.A.

for contributions to laser material interactions

Satyandra Gupta
Los Angeles, CA, U.S.A.

for contributions to the development of decision making tools for manufacturing automation

Oliver Gutfleisch
Darmstadt, Germany

for contributions to the development of magnetic materials for sustainable energy applications

Christoforos Hadjicostis
Nicosia, Cyprus

for contributions to distributed and discrete event systems

2020 NEWLY ELEVATED FELLOWS

Reinhold Haeb-Umbach
Paderborn, Germany

for contributions to robustness of automatic speech recognition

Mohammad Hajiaghayi
College Park, MD, U.S.A.

for contributions to algorithmic graph theory and to algorithmic game theory

Mary Hall
Salt Lake City, UT, U.S.A.

for contributions to compiler optimization and performance tuning

Tarek Hamel
Sophia Antipolis, France

for contributions to the field of aerial robotics

Pavan Kumar Hanumolu
Urbana, IL, U.S.A.

for contributions to the design of mixed-signal integrated circuits

John Harley
Peninsula, OH, U.S.A.

for development of monitoring and pump bearing systems for power transformers

Mark Hasegawa-Johnson
Urbana, IL, U.S.A.

for contributions to speech processing of under-resourced languages

Jinghan He
Beijing, China

for contributions to the protection of substations and traction power

2020 NEWLY ELEVATED FELLOWS

Aaron Hertzmann
San Francisco, CA, U.S.A.

for contributions to computer graphics and animation

Alan Hevner
Tampa, FL, U.S.A.

for contributions to design science and software engineering

Sandra Hirche
Munich, Germany

for contributions to human-machine interaction and networked control

Markus Hofmann
Middletown, NJ, U.S.A.

for leadership in development of content distribution networks

Daesik Hong
Seoul, Korea

for contributions to wireless and cellular communication technologies

Rose Hu
Logan, UT, U.S.A.

for contributions to design and analysis of mobile wireless communications systems

Zhenjiang Hu
Tokyo, Japan

for contributions to robust software development

Zhongsheng Hou
Beijing, China

for contributions to data-driven learning and control with applications in transportation systems

2020 NEWLY ELEVATED FELLOWS

Victor Huang
Cupertino, CA, U.S.A.

for leadership in the development of microprocessors in mobility products

Yo-Ping Huang
Tapei, Taiwan

for contribution to fuzzy and grey modeling in intelligent healthcare systems design

Muhammad Hussain
Austin, TX, U.S.A.

for contributions to flexible and stretchable electronic circuits

Auke Ijspeert
Lausanne, Switzerland

for contributions to biorobotics for locomotion

Benjamin Iniguez
Catalonia, Spain

for contributions to physics-based compact models of semiconductor devices

Akira Inoue
Kobe City, Japan

for development of inverse class-F power amplifiers for mobile phones

Mohammad Saiful Islam
Davis, CA, U.S.A.

for development of sensors and ultra-fast photodetectors

Jan Izykowski
Wroclaw, Poland

for contributions to fault localization in power lines

2020 NEWLY ELEVATED FELLOWS

Philippe Jacquet
Buc, France

for contributions to wireless protocols and communication networks

Weijia Jia
Macau, Macao

for contributions to optimal network routing and deployment

Bin Jiang
Nanjing, China

for contributions to intelligent fault diagnosis and fault-tolerant control

Tianzi Jiang
Beijing, China

for contributions to neuroimaging techniques

Masahiko Jinno
Kagawa, Japan

for contributions to elastic optical networks and C- and L-band transmission systems

Jacob Jones
Raleigh, NC, U.S.A.

for development of X-ray scattering methods to understand electromechanical properties of ferroelectrics

Robert Jopson
Holmdel, NJ, U.S.A.

for contributions to the mitigation of polarization effects in optically-amplified lightwave systems

Eduard Jorswieck
Braunschweig, Germany

for contributions to resource allocation in wireless interference networks

2020 NEWLY ELEVATED FELLOWS

Emil Jovanov
Huntsville, AL, U.S.A.

for contributions to wearable health monitoring

Markku Juntti
Oulu, Finland

for contributions to multiuser and multiantenna communications

William Kaiser
Los Angeles, CA, U.S.A.

for contributions to wireless sensor network technology and its applications to advancing healthcare

Akihiko Kandori
Tokyo, Japan

for contributions to superconductive magnetocardiography and diagnostic technology

Fakhreddine Karray
Waterloo, ON, Canada

for contributions to intelligent systems

Ramesh Karri
Brooklyn, NY, U.S.A.

for contributions to and leadership in trustworthy hardware

Beth Keser
San Diego, CA, U.S.A.

for contributions to electronic packaging technologies

Eric Klumperink
Enschede, Netherlands

for contributions to thermal noise cancelling and software defined radio architecture

2020 NEWLY ELEVATED FELLOWS

Sven Koenig
Los Angeles, CA, U.S.A.

for contributions to search algorithms and multi-agent coordination

Jeff Krolik
Durham, NC, U.S.A.

for contributions to statistical signal and sensor array processing for radar and sonar

Martin Kuball
Bristol, UK

for contributions to Raman thermography in semiconductor devices

Thomas Kuerner
Braunschweig, Germany

for contributions to terahertz data communication

Hak-Keung Lam
London, UK

for contributions to analysis and design of fuzzy model-based control systems

Gerard Ledwich
Brisbane, Australia

for development of control of power systems and power electronics

Kevin Lee
Menomonee Falls, WI, U.S.A.

for contributions to power quality for adjustable speed drives

Bradley Lehman
Boston, MA, U.S.A.

for contributions to high quality LED lighting and modeling and control of DC-DC converters

2020 NEWLY ELEVATED FELLOWS

Chris Leighton
Minneapolis, MN, U.S.A.

for contributions to the understanding of magnetic oxides, interfaces, and nanostructure

Jia Li
University Park, PA, U.S.A.

for contributions to real-time automatic image annotation and image retrieval

Mo Li
Singapore, Singapore

for development of wireless and networked sensing systems

Shihua Li
Nanjing, China

for contributions to the theory of mismatched disturbance rejection in industrial systems

Xiaodong Li
Victoria, Australia

for contributions to large-scale and particle swarm optimization

Xiaofeng Li
Shanghai, China

for contributions to the application of synthetic aperture radar for ocean remote sensing

Yun Li
Glasgow, UK

for application of computational intelligence to system design and control

Yun Wei Li
Edmonton, AB, Canada

for contributions to power electronics converters in microgrids and industrial drives

2020 NEWLY ELEVATED FELLOWS

Gong-Ru Lin
Taipei, Taiwan

for contributions to ultrafast fiber lasers and highspeed laser diodes for optical communications

Wallace Wan-Li Lin
San Jose, CA, U.S.A.

for contributions to understanding transistor charging mechanisms

Richard Lippmann
Wayland, MA, U.S.A.

for contributions to neural networks and assessment of computer security systems

Po-Tsun Liu
Hsinchu, Taiwan

for contributions to thin film transistor technologies

Xue Liu
Montreal, QC, Canada

for contributions to power and performance management of data centers and networked servers

Nuria Llombart Juan
Delft, Netherlands

for contributions to millimeter and submillimeter wave quasi-optical antennas

Jianbo Lu
Northville, MI, U.S.A.

for contributions to the control of automotive systems with applications in vehicle safety and performance

Kartikeyan Machavaram
Roorkee, India

for contributions to high-power millimeter wave and terahertz sources

2020 NEWLY ELEVATED FELLOWS

Yiannos Manoli
Freiburg, Germany

for contributions to the design of integrated analog-to-digital interface circuits and energy harvesting systems

Marco Martorella
Pisa, Italy

for contributions to multi-static inverse synthetic aperture radars

Ujjwal Maulik
Kolkata, India

for development of algorithms in evolutionary clustering and bioinformatics

James McDowall
Wallingford, CT, U.S.A.

for leadership in stationary battery standards and energy storage industry

Claudio Melchiorri
Bologna, Italy

for design and control of robot hands and telemanipulation systems

Michael Miller
Baltimore, MD, U.S.A.

for contributions to medical imaging, brain mapping, and computational anatomy

Durgamadhab Misra
Newark, NJ, U.S.A.

for contributions to the reliability of CMOS gate stacks with high-k dielectrics

Massimo Mitolo
Irvine, CA, U.S.A.

for contributions to the electrical safety of low-voltage systems

2020 NEWLY ELEVATED FELLOWS

Michael Mitzenmacher
Cambridge, MA, U.S.A.

for contributions to coding theory and networking algorithms

Amir-Hamed Mohsenian-Rad
Riverside, CA, U.S.A.

for contributions to optimal resource management in wireless networks and the smart grid

Mohamed Mokbel
Minneapolis, MN, U.S.A.

for contributions to building spatially- and privacy-aware systems

Guido Montorsi
Torino, Italy

for contributions to error-correcting codes and iterative decoding

Mutsuhiro Mori
Mito, Japan

for contributions to high voltage insulated gate bipolar transistors for traction and high voltage systems

Kirsten Morris
Waterloo, ON, Canada

for contributions to control and estimator design for infinite-dimensional systems

Yasamin Mostofi
Santa Barbara, CA, U.S.A.

for contributions to control and communications co-optimization in mobile sensor networks

Meinard Mueller
Erlangen, Germany

for contributions to music signal processing

2020 NEWLY ELEVATED FELLOWS

Robert Murphy
Pittsburgh, PA, U.S.A.

for contributions to machine learning algorithms for biological images

Luiz Augusto Nobrega Barroso
Rio de Janeiro, Brazil

for leadership in analytical methods for power system economics and regulation

Saeid Nahavandi
Victoria, Australia

for contributions to haptically-enabled robotic systems

Marc Najork
Palo Alto, CA, U.S.A.

for contributions to web crawling and web data processing

Patrick Naylor
London, UK

for contributions to signal processing for speech dereverberation and analysis

Moshe Nazarathy
Haifa, Israel

for contributions to optical systems and analog fiber-optic transmission

Bich-Yen Nguyen
Austin, TX, U.S.A.

for contributions to silicon on insulator technology

Shouleh Nikzad
Pasadena, CA, U.S.A.

for contributions to ultraviolet detectors for space applications

2020 NEWLY ELEVATED FELLOWS

Vasilis Ntziachristos
Munich, Germany

for contributions to optoacoustic imaging and intraoperative fluorescence imaging

Marcia O'Malley
Houston, TX, U.S.A.

for contributions to rehabilitation robotics and haptic systems

Burak Ozpineci
Oak Ridge, TN, U.S.A.

for contributions to transportation electrification and wireless charging of electric vehicles

Partha Pande
Pullman, WA, U.S.A.

for contributions to network-on-chip architectures for manycore computing

Panagiotis Papadimitratos
Stockholm, Sweden

for contributions to wireless mobile network security and privacy

Byung-Gook Park
Seoul, Korea

for contributions to charge trap flash memory and multiple patterning technology

Chul Soon Park
Daejeon, Korea

for development of low power millimeter-wave circuits and packages

Mugen Peng
Beijing, China

for contributions to radio resource management of wireless networks

2020 NEWLY ELEVATED FELLOWS

Ana Perez-Neira
Barcelona, Spain

for contributions to signal processing for satellite communications and systems

Michael Perrott
Nashua, NH, U.S.A.

for contributions to phase-locked loop integrated circuits

Ullrich Pfeiffer
Wuppertal, Germany

for development of silicon-based millimeter-wave and terahertz circuits and systems

Pierre Pinson
Lyngby, Denmark

for contributions to wind forecasting techniques in renewable energy integration

Pierluigi Poggiolini
Torino, Italy

for contributions to modeling of nonlinear propagation in coherent fiber-optic systems

Sara Pozzi
Ann Arbor, MI, U.S.A.

for contributions to neutron detection techniques and neutron transport Monte Carlo methods

Maria Prandini
Milano, Italy

for contributions to stochastic, hybrid and distributed control systems theory

Dennis Prather
Newark, DE, U.S.A.

for contributions to diffractive optical systems

2020 NEWLY ELEVATED FELLOWS

Markus Püschel
Zurich, Switzerland

for contributions to the implementation of signal processing techniques

Wei Qiao
Lincoln, NE, U.S.A.

for contributions to condition monitoring and control of power electronics interfaced rotating machine systems

Daniel Rabideau
Lexington, MA, U.S.A.

for contributions to radar architectures and technologies

Hesham Rakha
Blacksburg, VA, U.S.A.

for contributions to optimization, modeling and assessment of transportation systems

Hong Rao
Guangzhou, China

for leadership and contributions to the design and application of HVDC in AC/DC grids

Joseph Reinhardt
Iowa City, IA, U.S.A.

for contributions to medical image processing and analysis

Christ Richmond
Tempe, AZ, U.S.A.

for contributions to adaptive array processing algorithms

George Ridley
Rugby, UK

for contribution to stator core insulation condition analysis in large hydroelectric generators

2020 NEWLY ELEVATED FELLOWS

Jae-Sung Rieh
Seoul, Korea

for contributions to silicon-germanium integrated circuits for wireless communications

Chuntaek Rim
Seoul, Korea

for contributions to wireless power transfer for electric vehicles and mobile devices

Steven Ringel
Columbus, OH, U.S.A.

for contributions to compound semiconductor photovoltaics

Joel Rodrigues
Santa Rita de Sapucaí, Brazil

for contributions to Internet of Things and vehicular communications

Punam Saha
Iowa City, IA, U.S.A.

for contributions to quantitative bone microstructural imaging and analysis

Vivek Sarkar
Atlanta, GA, U.S.A.

for contributions to compiler technologies for high-performance computing

William Scanlon
Larne, UK

for contributions to antenna design for wearable and implantable applications

Manfred Schindler
Newtonville, MA, USA

for development in microwave switch technology for radar and wireless communication systems

2020 NEWLY ELEVATED FELLOWS

Kevin Schneider
Seattle, WA, U.S.A.

for contributions to the development of open-access tools for distribution system analysis

Tanja Schultz
Bremen, Germany

for contributions to multilingual speech recognition and biosignal processing

Sirish Shah
Edmonton, ON, Canada

for contributions to process and performance monitoring

Vladimir Shiltsev
Batavia, IL, U.S.A.

for development of electron lenses and contributions to accelerator technology and beam physics

Nabil Simaan
Nashville, TN, U.S.A.

for contributions to dexterous continuum robotics for surgery

Dimitra Simeonidou
Bristol, UK

for contributions to optical networking systems and applications

Evgenia Smirni
Williamsburg, VA, U.S.A.

for contributions to modeling and performance forecasting of complex systems

Joshua Smith
Seattle, WA, U.S.A.

for contributions to far-and-near-field wireless power, backscatter communication, and electric field sensing

2020 NEWLY ELEVATED FELLOWS

Alex Snoeren
La Jolla, CA, U.S.A.

for contributions to management and security of networked systems

Yong Song
Chongqing, China

for contributions to neural adaptive and fault-tolerant control techniques

Sarah Spurgeon
Canterbury, UK

for contributions to variable structure control and estimation

Dipti Srinivasan
Singapore, Singapore

for contributions to computational intelligence for Smart Grid

Gookwon Suh
Ithaca, NY, U.S.A.

for contributions to the development of secure hardware circuits and processors

Nian-Xiang Sun
Boston, MA, U.S.A.

for contributions to integrated magnetic and magnetoelectric materials and devices

Karthikeyan Sundaresan
Princeton, NJ, U.S.A.

for contributions to algorithms for mobile networking and computing

Yuji Suzuki
Tokyo, Japan

for development of electret materials

2020 NEWLY ELEVATED FELLOWS

Osamu Tabata
Kyoto, Japan

for contributions to the development and commercialization of micro electro mechanical systems

Atsuo Takanishi
Tokyo, Japan

for contribution to the development of humanoid robots

Hwa Yaw Tam
Kowloon, Hong Kong

for contributions to fiber sensing networks for railway predictive maintenance

Bruce Terris
Sunnyvale, CA, U.S.A.

for contributions to high density magnetic recording and spintronic materials

Ravi Todi
San Jose, CA, U.S.A.

for contributions to innovative design and commercialization of high performance eDRAM

Joel Tropp
Pasadena, CA, U.S.A.

for contributions to sparse signal processing

Gokhan Tur
Los Altos, CA, U.S.A.

for leadership in spoken language understanding and applications to virtual personal assistant products

Shahrokh Valaee
Toronto, ON, Canada

for contributions to localization of wireless nodes

2020 NEWLY ELEVATED FELLOWS

Dimitri Van De Ville
Geneva, Switzerland

for contribution to image processing for computational brain imaging

Peter Varman
Houston, TX, U.S.A.

for contributions to input/output scheduling algorithms for storage systems

Malathi Veeraraghavan
Charlottesville, VA, U.S.A.

for contributions to control-plane architectures, signal protocols and hybrid networks

Narasimham Vempati
Chandler, AZ, U.S.A.

for contributions to power system state estimation and transmission congestion markets

Mahinda Vilathgamuwa
Brisbane, Australia

for contributions to power quality and grid storage

Ba-Ngu Vo
Perth, Australia

for contributions to the theory of multiple object tracking and estimation

Aaron Wagner
Ithaca, NY, U.S.A.

for contributions to distributed data compression

Haining Wang
Newark, DE, U.S.A.

for contributions to network and cloud security

2020 NEWLY ELEVATED FELLOWS

Tza-Huei Wang
Baltimore, MD, U.S.A.

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

Yunhong Wang
Beijing, China

for contributions to iris and face recognition

John Watson
Aberdeen, UK

for contributions to the development of submersible holography and in-situ imaging of marine organisms

Yonggang Wen
Singapore, Singapore

for contributions to cloud systems for multimedia signal processing and communications

Richard Wesel
Los Angeles, CA, U.S.A.

for contributions to channel coding and reliable communication

Joerg Widmer
Madrid, Spain

for contributions to wireless networking and millimeter-wave communications

Sheldon Williamson
Oshawa, ON, Canada

for contributions to electric energy storage systems for transportation electrification

Steve Wozniak
Los Gatos, CA, U.S.A.

for development of personal computers

2020 NEWLY ELEVATED FELLOWS

Hongyi Wu
Norfolk, VA, U.S.A.

for contributions to resilient mobile computing systems

Ligang Wu
Harbin, China

for contributions to sliding mode control and robust filtering

Pengfei Xia
San Diego, CA, U.S.A.

for contributions to multi-input multi-output millimeter wave wireless communications

Yang Xiang
Melbourne, Australia

for contributions to network and system security

Yang Xiao
Tuscaloosa, AL, U.S.A.

for contributions to wireless medium access control

Jiang Xie
Charlotte, NC, U.S.A.

for contributions to mobility and resource management of wireless networks

Guoliang Xing
Hong Kong, Hong Kong

for contributions to sensor networks and low-power wireless networks

Mengdao Xing
Xian, China

for contributions to radar imaging and motion compensation algorithms

2020 NEWLY ELEVATED FELLOWS

Hui Xiong
Beijing, China

for contributions to data mining and mobile computing

Huazhong Yang
Beijing, China

for low-power circuit techniques for sensor applications and design automation

Lan Yang
Saint Louis, MO, U.S.A.

for contributions to optical sensing and non-Hermitian photonics

Laurence Tianruo Yang
Antigonish, NS, Canada

for contributions to modeling and design for cyber-physical-social systems

Shiwen Yang
Chengdu, China

for development of time-modulated antenna arrays

Jieping Ye
Ann Arbor, MI, U.S.A.

for contributions to the methodology and application of machine learning and data mining

Jong Chul Ye
Daejeon, Korea

for contributions to signal processing and machine learning for bio-medical imaging

Jianjun Yu
Basking Ridge, NJ, U.S.A.

for contributions to high-performance optical fiber communication systems

2020 NEWLY ELEVATED FELLOWS

Zeev Zalevsky
Ramat-Gan, Israel

for contributions to super-resolved imaging and remote biomedical sensing

Masoud Zargari
Irvine, CA, U.S.A.

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

Yonghong Zeng
Singapore, Singapore

for contributions to spectrum sensing and medium access control in cognitive radio

Zhigang Zeng
Wuhan, China

for contributions to analysis and synthesis of neurodynamic systems

Bing Zhang
Beijing, China

for contributions to hyperspectral image acquisition and processing

Lei Zhang
Redmond, WA, USA

for contributions to large-scale visual recognition and multimedia information retrieval

Tong Zhang
Clearwater Bay, Hong Kong

for contributions to machine learning algorithms

Tong Zhang
Albany, NY, U.S.A.

for contributions to system design and VLSI implementation for data storage

2020 NEWLY ELEVATED FELLOWS

Xiao-Ping Zhang
Birmingham, UK

for contributions to modeling and control of high-voltage DC and AC transmission systems

Xiaowu Zhang
Singapore, Singapore

for contributions to three-dimensional integrated circuits

Yan Zhang
Bærum, Norway

for contributions to resource management in wireless networks

Yi Zhang
Winnipeg, MB, Canada

for leadership in the development of real time digital simulation in power systems

Yingjun Zhang
Hong Kong, Hong Kong

for contributions to resource allocation and optimization in wireless communications

Zhongfei Zhang
Binghamton, NY, U.S.A.

for contributions to multimodal data content understanding and mining

Dongbin Zhao
Beijing, China

for contributions to adaptive dynamic programming and reinforcement learning

Jun Zhao
Shenyang, China

for contributions to switched systems and dissipativity theory

2020 NEWLY ELEVATED FELLOWS

Bowen Zhou
Ossining, NY, U.S.A.

for leadership in human language technologies

Shaohua Zhou
Princeton, NJ, U.S.A.

for contributions to image analysis for medical imaging and face recognition