

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Tarek Abdelzaher
Urbana, IL, USA

for contributions to cyber-physical systems and real-time computing

Prof. Enrique Acha
Tampere, Finland

for contributions to power electronics modelling and applications in electrical power systems

Prof. Deji Akinwande
Austin, TX, USA

for contributions to wafer-scale graphene synthesis and application to flexible devices

Dr. Ahmed Ali
Greensboro, NC, USA

for leadership in high-speed analog-to-digital converter design and calibration

David Allan
Fountain Green, UT, USA

for contributions to timing systems, and precision clocks

Prof. Aaron Ames
Pasadena, CA, USA

for contributions to hybrid and safety-critical nonlinear control with demonstration on robotic systems

Prof. Animashree Anandkumar
Pasadena, CA, USA

for contributions to theory and applications in signal processing, machine learning, and artificial intelligence

Prof. Gianluca Antonelli
Cassino, Italy

for contributions to modeling and control of underwater robot

NEWLY ELEVATED FELLOW CLASS 2021

Dr. Mohammad Nazmul Anwar
Pontiac, MI, USA

for contributions to the system-balanced-robust power electronics design methodology for electrified vehicles

Hideaki Aochi
Kawasaki, Japan

for contributions to three dimensional flash memories

Prof. Alberto Avolio
Sydney, Australia

for contributions to knowledge and monitoring of arterial hemodynamics

Dr. Alireza Bakhshai
Kingston, ON, Canada

for contributions to the development of synchronization techniques for power electronics converter

Dr. Rajeev Balasubramonian
Salt Lake City, UT, USA

for contributions to in-memory computation and memory interface design

Prof. Timothy Barfoot
Toronto, ON, Canada

for contributions to mobile robot navigation

Prof. David Basin
Zurich, Switzerland

for contributions to formal methods for information security

Prof. Mehdi Bennis
Oulu, Finland

for contributions to resource optimization in heterogeneous and low-latency wireless network

NEWLY ELEVATED FELLOW CLASS 2021

Dr. Achintya Bhowmik
Cupertino, CA, USA

for leadership in perceptual augmentation devices

Prof. Wim Bogaerts
Gent, Belgium

for contributions to design methodologies for silicon photonics components and circuits

Prof. Peter Burke
Irvine, CA, USA

for contributions to active and passive microwave devices

Prof. Danijela Cabric
Los Angeles, CA, USA

for contributions to theory and practice of spectrum sensing and cognitive radio systems

Prof. Jianfei Cai
Melbourne, VC, Australia

for contributions to multimedia transmission and content analysis

Prof. Benton Calhoun
Charlottesville, VA, USA

for contributions to sub-threshold integrated circuits and self-powered systems

Prof. Kirk Cameron
Blacksburg, VA, USA

for contributions to measurement and management of energy in high-performance-computing systems

NEWLY ELEVATED FELLOW CLASS 2021

Calin Cascaval
Mountain View, CA, USA

for contributions to programming models for parallel machines and heterogeneous mobile devices

Prof. Chan-Byoung Chae
Seoul, Korea

for contributions to MIMO design and prototypes for emerging communication systems

Prof. Yogesh Chauhan
Kanpur, India

for contributions to compact modeling of Si and GaN transistors

Prof. Min Chen
Wuhan, China

for contributions to data-driven communication, caching, and computing

Dr. Jingdong Chen
Xi'an, China

for contributions to microphone array processing and speech enhancement in noisy and reverberant environments

Prof. Yaow-Ming Chen
Taipei, Taiwan

for contributions to grid-connected power converters for renewable energy applications

Prof. Gene Cheung
Toronto, ON, Canada

for contributions to graph spectral image processing and interactive video streaming

Prof. Gabriella Cincotti
Rome, Italy

for contributions to planar photonic devices and beam diffraction in anisotropic media

NEWLY ELEVATED FELLOW CLASS 2021

Dr. Stefano Coraluppi
Woburn, MA, USA

for contributions to multi-sensor multi-target tracking

Prof. Bruce Croft
Amherst, MA, USA

for contributions to information retrieval

Prof. Huang De Shuang
Shanghai, China

for contributions to neural networks for pattern recognition and bioinformatics

Bronis de Supinski
Tracy, CA, USA

for leadership in the design and use of large-scale computing systems

Prof. Filip De Turck
Gent, Belgium

for contributions to network resource management and adaptive service delivery

Prof. Domitilla Del Vecchio
Cambridge, MA, USA

for contributions to circuit engineering in synthetic biology

Prof. Hilmi Demir
Ankara, Turkey

for contributions to semiconductor nanocrystal optoelectronics, colloidal nanophotonics, and lighting

Dr. David Donoho
Stanford, CA, USA

for contributions to sparse signal acquisition and processing

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Sebastian Elbaum
Charlottesville, VA, USA

for contributions of testing techniques for evolving systems

Prof. Jaafar M.H. Elmirghani
Leeds, UK

for contributions to energy-efficient communications

Dr. Issam El-Naqa
Ann Arbor, MI, USA

for contributions to machine learning applications in medicine and imaging

Dr. Rudy Emrick
Gilbert, AZ, USA

for contributions to the development of millimeter-wave communication systems

Prof. Natalie Enright Jerger
Toronto, ON, Canada

for contributions to networks-on-chip for many-core architectures

Prof. Michael Ernst
Seattle, WA, USA

for contributions to software analysis, testing, and verification

Dr. Cynthia Finelli
Ann Arbor, MI, USA

for leadership and scholarship in engineering education

Prof. Vasilis Fthenakis
New York, NY, USA

for contributions to photovoltaics technology

Dr. Evgeniy Gabrilovich
Mountain View, CA, USA

for contributions to web information retrieval technology

Dr. Haris Gačanin
Antwerp, Belgium

for development of operations and management systems for home broadband networks

Prof. Joao Gama
Porto, Portugal

for contributions to mining data streams

Prof. Sharon Gannot
Ramat-Gan, Israel

for contributions to acoustical modelling and statistical learning in speech enhancement

Prof. Wenzhong Gao
Denver, CO, USA

for contributions to grid integration of wind power and electric vehicle technology

Prof. Jonathan Garibaldi
Nottingham, UK

for contributions to computational intelligence techniques in data analysis and decision support

Prof. James Gee
Philadelphia, PA, USA

for contributions to medical image processing and analysis

Dr. Hua Geng
Beijing, China

for contribution to control of renewable energy power converters

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Lise Getoor
Santa Cruz, CA, USA

for contributions to machine learning and reasoning under uncertainty

Prof. Yolanda Gil
Los Angeles, CA, USA

for contributions to geoscience and scientific discovery with intelligent workflow systems

Dr. Oriol Gomis Bellmunt
Barcelona, Spain

for contributions to grid integration of renewable energy sources

Yifan Gong
Redmond, WA, USA

for leadership in creating cloud speech recognition services in industry

Prof. Amit Goyal
Buffalo, NY, USA

for contributions to high-temperature superconducting materials

Dr. Deepak Goyal
Chandler, AZ, USA

for contributions to fault isolation and failure analysis

Dr. David Gracias
Baltimore, MD, USA

for contributions to three-dimensional assembly and origami engineering of nanostructured materials and devices

NEWLY ELEVATED FELLOW CLASS 2021

Michael D. Griffin
Birmingham, AL, USA

for leadership in space infrastructure and Space Shuttle, International Space Station, Hubble and other missions

Prof. Matthias Grossglauser
Lausanne, Switzerland

for contributions to the modeling and analysis of network traffic and data

Prof. Yongpei Guan
Gainesville, FL, USA

for contributions to robust and stochastic optimization for power system operations

Dr. Dongning Guo
Evanston, IL, USA

for contributions to multi-user detection and estimation theory

Prof. Shuxiang Guo
Takamatsu, Japan

for contributions to medical robots for minimally invasive surgery and biomimetic underwater robots

Dr. Amit Gupta
Singapore, Singapore

for leadership in power conversion systems

Dr. Ismail Guvenc
Raleigh, NC, USA

for contributions to heterogeneous wireless networks and wireless localization

Prof. Wolfgang Heidrich
Thuwal, Saudi Arabia

for contributions to high dynamic range display and computational cameras

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Robert Henderson
Edinburgh, UK

for contributions to solid-state single photon imaging

Dr. Enrique Herrera-Viedma
Granada, Spain

for contributions to fuzzy decision systems and linguistic modeling

Dr. Paul Hershey
Arlington, VA, USA

for application of data analytic to assist human decision-making

Stephen Hodges
Cambridge, UK

for leadership in pervasive computing systems

Prof. Ayanna Howard
Atlanta, GA, USA

for contributions to human-robot interaction systems

Dr. Kaibin Huang
Hong Kong, Hong Kong

for contributions to wirelessly powered communications and multi-antenna communications

Prof. Yi Huang
Liverpool, UK

for contributions to rectenna technology

Dr. Chih-Lin I.
Beijing, China

for leadership in wireless mobile networks

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Hideaki Ishii
Yokohama, Japan

for contributions to networked control of large-scale systems

Prof. Bruce Jacob
College Park, MD, USA

for contributions to computer memory design and analysis

Prof. Bernhard Jakoby
Linz, Austria

for contributions to fluidic sensors

Prof. Tara Javidi
La Jolla, CA, USA

for contributions to stochastic resource allocation and active hypothesis testing

Prof. Xiuping Jia
Kensington, Australia

for contributions to feature mining and classification of hyperspectral images

Dr. Xudong Jiang
Singapore, Singapore

for contributions to face and fingerprint image recognition

Prof. Daniel Jimenez
College Station, TX, USA

for contributions to neural branch prediction in microprocessor research and design

Dr. Valentin Jordanov
Santa Fe, NM, USA

for contributions to real-time digital and analog pulse processing in radiation measurements

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Dragan Jovcic
Aberdeen, UK

for contributions to improvements in multi-terminal HVDC transmission grids and development of HVDC transformers

Dr. Inyup Kang
San Diego, CA, USA

for leadership in development of chip-set technologies for cellular communications

Stefanos Kaxiras
Uppsala, Sweden

for contributions to high-performance and power-efficient memory hierarchies

Kimberly Keeton
Palo Alto, CA, USA

for contributions to storage and memory systems

Dr. Ali Keshavarzi
Stanford, CA, USA

for contributions to low-power circuits and devices in scaled CMOS technologies

Prof. Dennis Killinger
Tampa, FL, USA

for contributions to laser spectroscopy

Dr. Byoung-Hoon Kim
Seoul, Korea

for contributions to development and standardization of mobile communication technologies

Prof. Chang-Jin Kim
Los Angeles, CA, USA

for research of surface-tension-based microelectromechanical systems

NEWLY ELEVATED FELLOW CLASS 2021

Dr. Alan Kleinsasser
Pasadena, CA, USA

for contributions to superconducting electronic devices, circuits, and systems

Prof. Craig Knoblock
Los Angeles, CA, USA

for contributions to semantic data integration techniques

Nicholas Kolia
Waltham, MA, USA

for contributions to the development of Gallium Nitride monolithic microwave integrated circuit technology

Prof. Yakov Krasik
Haifa, Israel

for contributions to plasma-based electron sources

Prof. Hadas Kress-Gazit
Ithaca, NY, USA

for contributions to automated control synthesis and formal methods for robotics

Lori Lamel
Orsay, France

for contributions to automatic speech recognition

Dr. Laurent Larger
Franche-Comte, France

for contributions to optoelectronic delay oscillators and neuromorphic processing applications

Prof. Sophie LaRochelle
Quebec, QC, Canada

for contributions to fiber devices and data transmission technologies

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Francis Lau
Kowloon, Hong Kong

for contributions to analysis of chaotic communications systems and low-density parity-check code design

Prof. Svetlana Lazebnik
Urbana, IL, USA

for contributions to computer vision

Prof. Kyoung Mu Lee
Seoul, Korea

for contributions to image restoration and visual tracking

Prof. Wenke Lee
Atlanta, GA, USA

for contributions to machine-learning-based approaches to intrusion and botnet detection

Prof. Wonjun Lee
Seoul, Korea

for contributions to multiple access and resource allocation in wireless networks

Prof. Chunming Li
Chengdu, China

for contributions to computer vision and medical image analysis

Prof. Houqiang Li
Hefei, China

for contributions to video coding and multimedia content analysis

Prof. Jiandong Li
Xi'an, China

for leadership in heterogeneous self-organizing wireless networks

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Jun Li
Guangzhou, China

for contributions in hyperspectral image processing

Prof. Ninghui Li
West Lafayette, IN, USA

for contributions to data privacy and security

Zhao-Liang Li
Beijing, China

for contributions to thermal infrared remote sensing

Prof. Xiaofeng Liao
Chongqing, China

for contributions to neurodynamic systems and chaotic cryptography

Prof. Honghai Liu
Portsmouth, UK

for contributions to theory and applications of human-machine systems

Dr. Shixia Liu
Beijing, China

for contributions to visual text analysis and visual model analysis

Prof. Yang Liu
Seattle, WA, USA

for contributions to speech understanding and language learning technology

Prof. Vitaliy Lomakin
San Diego, CA, USA

for contributions to theoretical and computational electromagnetics

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Jose Lozano
Leioa, Spain

for contributions to the estimation of distribution algorithms in evolutionary computation

Prof. Bao-Liang Lu
Shanghai, China

for contributions to artificial neural networks and affective brain-computer interfaces

Dr. Daoqiang Lu
Shanghai, China

for development of materials and manufacturing processes for mobile devices

Dr. Le Lu
Bethesda, MD, USA

for contributions to machine learning for cancer detection and diagnosis

Dr. Ning Lu
Raleigh, NC, USA

for contributions to load modeling and control methods for providing demand side grid services

Dr. Rongxing Lu
Fredericton, NB, Canada

for contributions to security and privacy in vehicular communications

Dr. Yung-Hsiang Lu
West Lafayette, IN, USA

for contributions to energy efficiency of computer systems

Prof. Zhengyu Lu
Zhejiang, China

for contributions to DC-DC power conversion and control

NEWLY ELEVATED FELLOW CLASS 2021

Dr. Huadong Ma
Beijing, China

for contributions to multimedia sensor networks

Prof. Roya Maboudian
Berkeley, CA, USA

for contributions to surface coatings and structural materials for microelectromechanical systems

Gourab Majumdar
Fukuoka, Japan

for contribution to power semiconductor devices and intelligent power module

Prof. Stephane Mangin
Lorraine, France

for contributions to ultrafast magnetisation manipulation

Dr. Milos Manic
Richmond, VA, USA

for contributions to machine learning based cybersecurity for critical infrastructures

Prof. Athina Markopoulou
Irvine, CA, USA

for contributions to network coding systems and network measurement

Prof. Dejan Markovic
Los Angeles, CA, USA

for contributions to low-power VLSI signal processing and neurotechnology

Prof. Jose Martinez
Ithaca, NY, USA

for contributions to adaptable multiprocessor computer architectures

NEWLY ELEVATED FELLOW CLASS 2021

Dr. Dmitri Maslov
Yorktown Heights, NY, USA

for contributions to quantum circuit synthesis and optimization, and compiling for quantum computers

Prof. David Matolak
Columbia, SC, USA

for contributions to wireless channel modeling and applications

Dr. Andrey Matsko
Pasadena, CA, USA

for contributions to the development of microwave photonic oscillators

Prof. Giovanni Mazzanti
Bologna, Italy

for contributions to high voltage direct current cable systems

Prof. Matthew Mckay
Kowloon, Hong Kong

for contributions to random matrix theory in statistical signal processing

Prof. Sharad Mehrotra
Irvine, CA, USA

for contributions to the fields of data management and multimedia information retrieval

Prof. Marco Mellia
Torino, Italy

for contributions to Internet traffic analysis

Prof. Prabhat Mishra
Gainesville, FL, USA

for contributions to system-on-chip validation and design automation of embedded systems

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Yasser Mohamed
Edmonton, AB, Canada

for contributions to the control and dynamic analysis of microgrids and power electronic systems

Prof. Roberto Morandotti
Montreal, QC, Canada

for contributions to integrated nonlinear and quantum optics

Dr. Jose Moreira
Yorktown Heights, NY, USA

for advances in high performance computing systems software and processor design

Dr. Itsuro Morita
Fujimino, Japan

for contributions to large-capacity transmissions systems with high-speed optical signals

Dr. Katherine Morse
San Diego, CA, USA

for contributions to standardization of simulation technologies

Prof. Andreas Moshovos
Toronto, ON, Canada

for contributions to out-of-order processor microarchitecture and multiprocessor memory systems

Dr. Bhyrav Mutnury
Austin, TX, USA

for contributions to signal integrity in complex data center systems

Nachiappan Nagappan
Redmond, WA, USA

for contributions to software reliability

NEWLY ELEVATED FELLOW CLASS 2021

Dr. Tomohiro Nakatani
Kyoto, Japan

for contributions to far-field signal processing for speech enhancement and recognition

Dr. Omkaram Nalamasu
Santa Clara, CA, USA

for contributions to patterning solutions and advancing materials engineering for electronics, display, and energy

Dr. Chandra Namuduri
Warren, MI, USA

for contributions to power electronics for safe and energy efficient electric vehicles

Prof. Jose Neira
Zaragoza, Spain

for contributions to simultaneous localization and mapping (SLAM) for robot navigation

Prof. Wing Kwan Ng
Sydney, Australia

for contributions to resource allocation for wireless communication networks

Prof. Johan Nuyts
Leuven, Belgium

for contributions to theory and algorithms for image reconstruction in emission and transmission tomography

Prof. Salah Obayya
Giza, Egypt

for contributions to computational photonics

Prof. Roberto Oboe
Padova, Italy

for contributions to remote motion control systems

Dr. Jun Ohta
Ikomo, Japan

for contributions to CMOS image sensors and devices for biomedical applications

Prof. Alessandro Orso
Atlanta, GA, USA

for contributions to software testing and debugging

Dr. John Owens
Davis, CA, USA

for contributions to heterogeneous parallel computing

Prof. Asuman Ozdaglar
Cambridge, MA, USA

for contributions to distributed multi-agent networks

Prof. Sanjib Panda
Singapore, Singapore

for contributions to iterative learning control of motor drives

Prof. Ai-Chun Pang
Taipei, Taiwan

for contributions to resource management and service provisioning for mobile edge networks

Prof. Leila Parsa
Santa Cruz, CA, USA

for contributions to control of multi-phase permanent magnet motor drives

NEWLY ELEVATED FELLOW CLASS 2021

Gurudatta Parulkar
Menlo Park, CA, USA

for contributions to improving the architecture of the internet and software defined networking

Dr. Hanchuan Peng
Nanjing, China

for contributions to visualization and quantitative analysis of large-scale biological data

Dr. Pietro Perona
Pasadena, CA, USA

for contributions to visual recognition algorithms and datasets

Prof. Chiara Petrioli
Roma, Italy

for contributions to wireless and underwater networks

Dr. Jeffrey R. Piepmeier
Greenbelt, MD, USA

for contributions to microwave radiometry to improve calibration, radio frequency interference filtering, and polarimetry

Dr. Gianluigi Pillonetto
Padova, Italy

for contributions to kernel-based linear system identification

Prof. Dario Pompili
Piscataway, NJ, USA

for contributions to underwater acoustic communication networks

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Sandeep Pradhan
Ann Arbor, MI, USA

for contributions to coding for distributed compression and structured coding

Prof. Chunjiang Qian
San Antonio, TX, USA

for contributions to control and estimation of nonlinear systems

Prof. Gang Qu
Los Angeles, CA, USA

for contributions to hardware intellectual property protection and security

Prof. Daniel Quevedo
Queensland, Australia

for contributions to optimal and model predictive control

Prof. Louiqa Raschid
College Park, MD, USA

for contributions to data management, information integration and data mining

Dr. Akshay Rathore
Montreal, QC, Canada

for contributions to the design and advancement of power electronics for drives and automotive industries

Dr. Martin Reddy
San Francisco, CA, USA

for contributions to conversational artificial intelligence

NEWLY ELEVATED FELLOW CLASS 2021

Dr. Gamal Refai-Ahmed
Santa Clara, CA, USA

for leadership in thermal management of electronics product development

Bryan Root
Burnsville, MN, USA

for leadership in improving semiconductor reliability test methods

Prof. Grigore Rosu
Urbana, IL, USA

for contributions to runtime verification and programming language semantics

Dr. Claude Samson
Sophia Antipolis, France

for contributions to mobile and underactuated mechanical systems control

Prof. Paul Sanberg
Tampa, FL, USA

for contributions to stem cell therapies for neurodegenerative conditions

Ruhi Sarikaya
Seattle, WA, USA

for leadership in spoken-language-processing and conversational understanding systems

Prof. Jacquelin Scherpen
Groningen, Netherlands

for contributions to nonlinear model reduction and passivity-based control

Prof. Dieter Schmalstieg
Graz, Austria

for contributions to augmented reality

Dr. Julia Schnabel
London, UK

for contributions to medical image computing

Dr. Eve Schooler
Portola Valley, CA, USA

for contributions to multimedia protocols and internet standards

Prof. Gesualdo Scutari
West Lafayette, IN, USA

for contributions to distributed optimization in signal processing and communications

Dr. Kalyan Sen
Monroeville, PA, USA

for the development and application of power flow control technology

Prof. Ashwin Seshia
Cambridge, UK

for contributions to resonant-based inertial and mode-localized sensors

Prof. Ling Shao
Abu Dhabi, United Arab Emirates

for contributions to computer vision and representation learning

Prof. Jinhua She
Hachioji, Japan

for contributions to intelligent control of complex metallurgical processes

Prof. Alla Sheffer
Vancouver, BC, Canada

for contributions to mesh parameterization and hexahedral meshing

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Guangming Shi
Xi An, China

for contributions to image representation and image reconstruction

Prof. Hyundong Shin
Yongin-si, Korea

for contributions to the analysis and design of wireless communication and networking

Dr. Robert Shin
Cambridge, MA, USA

for leadership in electromagnetic modeling of radar systems and in micorwave remote sensing

Prof. Richa Singh
New Delhi, India

for contributions to robust and secure biometrics

Prof. Saurabh Sinha
Johannesburg, South Africa

for leading micro/nanoelectronics research and education in Africa

Prof. Bruno Sinopoli
Saint Louis, MO, USA

for contributions to networked and secure control systems

Prof. Ramteen Sioshansi
Columbus, OH, USA

for contributions to energy storage in electric power systems

Prof. Poul Sorensen
Kongens Lyngby, Denmark

for contributions to wind power converter control and grid integration

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Suresh Srivastava
Kanpur, India

for contributions to power system security and stability

Prof. Erik Strom
Gothenburg, Sweden

for contributions to reliable low latency communications and synchronization of code-division systems

Prof. Tetsuya Suemitsu
Sendai, Japan

for contributions to high-frequency high-electron-mobility transistors

Jasjit Suri
Roseville, CA, USA

for contributions to computer-aided biomedical imaging diagnosis and its commercialization in atherosclerosis

Dr. Hiralal Suryawanshi
Nagpur, India

for contributions to converters for renewable energy systems, drives, and electrical machines

Prof. Willy Susilo
Wollongong, Australia

for contributions to cloud computing security

Mahesh Swamy
Waukegan, IL, USA

for development of power electronics topologies

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Mehdi Tahoori
Karlsruhe, Germany

for contributions to resilient nanoscale integrated circuits

Dr. Shinzo Tamai
Kobe, Japan

for contributions to control for motor drives and three-level converters

Dr. Jie Tang
Beijing, China

for contributions to knowledge discovery from data and social network mining

Prof. Nelson Tansu
Bethlehem, PA, USA

for contributions to semiconductor photonics technologies

Prof. Luciano Tarricone
Lecce, Italy

for contributions to microwave interactions with living systems and biomedical applications

Dr. Ivan Tashev
Redmond, WA, USA

for contributions to audio signal processing systems and algorithms for commercial microphone arrays

Prof. Stephan Ten Brink
Stuttgart, Germany

for contributions to iterative detection and decoding

Prof. My Thai
Gainesville, FL, USA

for contributions to modeling, design, and optimization of networked systems

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Thomas Thundat
Buffalo, NY, USA

for contributions to multi-modal microelectromechanical systems for chemical and biological sensors

Dr. Edward Tiedemann
San Diego, CA, USA

for innovation and standardization of digital cellular communications

Prof. Mi-Ching Tsai
Tainan, Taiwan

for leadership in magnetic materials for the electric motor industry

Prof. Vincent Shin-Mu Tseng
Hsinchu, Taiwan

for contributions to utility pattern mining and biomedical applications

Dr. Takatoshi Tsujimura
Tokyo, Japan

for contributions to the development of organic-light-emitting diode systems

Prof. Daniela Tuninetti
Chicago, IL, USA

for contributions to theory of repetition protocols and wireless interference management

Prof. Mohammad Uddin
Barrie, ON, Canada

for contributions to control techniques for AC motor drives

Prof. Wolfgang Utschick
München, Germany

for contributions to signal processing algorithms for multi-antenna communications systems

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Jaideep Vaidya
Newark, NJ, USA

for contributions to privacy protection in data analytics and access control management

Dr. Nathan Van De Wouw
Eindhoven, Netherlands

for contributions to hybrid, data-based and networked control

Prof. Wil Van der Aalst
Aachen, Germany

for contributions to process mining and workflow processes

Dr. Rath Vannithamby
Portland, OR, USA

for contributions to resource allocation for cellular and internet of things technologies

Dr. Sergio Vazquez
Seville, Spain

for contributions to control techniques for power converters and drives

Dr. Ganesh Venayagamoorthy
Clemson, SC, USA

for contributions to the application of artificial intelligence to power systems

Dr. Luisa Verdoliva
Naples, Italy

for contribution to multimedia forensics

Dr. Tuomas Virtanen
Tampere, Finland

for contributions to sound event detection and source separation

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Joel Voldman
Cambridge, MA, USA

for contributions to electronic microscale manipulation of cells

Prof. Pascal Vontobel
Shatin N.T., Hong Kong

for contributions to graphical models for channel coding

Prof. Michael Wakin
Golden, CO, USA

for contributions to sparsity-based signal processing and compressive sensing

Dr. Cong Wang
Hong Kong, Hong Kong

for contributions to security of cloud storage and computation

Prof. Danwei Wang
Singapore, Singapore

for contributions to modelling, analysis, and control for constrained robots

Dr. Hanyang Wang
Jays Close Basingstoke, UK

for contributions to mobile terminal antennas

Prof. Hong Wang
Xi'an, China

for development, integration, and commercialization of novel dielectric ceramics and composites for passive integration

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Honggang Wang
Dartmouth, MA, USA

for contributions to low power wireless for IoT and multimedia applications

Prof. Jianhui Wang
Dallas, TX, USA

for contributions to unit commitment and economic dispatch with renewable generation

Prof. Jianqing Wang
Nagoya, Japan

for contributions to electro-magnetic compatibility of biological and wearable/implant devices

Dr. Jin Wang
Columbus, OH, USA

for development of high density power converters and their use in electric cars

Dr. Lizhe Wang
Wuhan, China

for contributions to high performance computing in processing, analysis and applications of remote sensing imagery

Dr. Meng Wang
Hefei, China

for contributions to multimedia content analysis and retrieval

Prof. Xiaorui Wang
Columbus, OH, USA

for contributions to power management of data center servers and embedded systems

Prof. Yingxu Wang
Calgary, AB, Canada

for contributions to real-time autonomous systems

Prof. Zhaocheng Wang
Beijing, China

for contributions to pilot design and modulation of OFDM wireless systems

Prof. Zhongdong Wang
Manchester, UK

for contributions to insulating liquids and frequency response analysis methods for power transformers

Prof. Paul Weiss
Los Angeles, CA, USA

for contributions to nanoscience and specifically electronic transport in molecular systems

Prof. Fushuan Wen
Yuquan, China

for contributions to fault diagnosis in power grids

Prof. Geyi Wen
Nanjing, China

for contributions to antenna quality factor

Prof. Patrick Wheeler
Nottingham, UK

for contributions to matrix power converter technology

Dr. Mingzhong Wu
Fort Collins, CO, USA

for contributions to spintronics and magnetization

Prof. Wenchuan Wu
Beijing, China

for contributions to energy management, operations, and control

Dr. Yifeng Wu
Goleta, CA, USA

for contributions to Gallium Nitride microwave and power conversion devices

Dr. Chongjin Xie
San Mateo, CA, USA

for contributions to optical transmission and datacenter optical networking

Prof. Zheng Xu
Zhejiang, China

for contributions to control and modeling of modular multilevel converter based HVDC transmission systems

Dr. Dong Xuan
Columbus, OH, USA

for contributions to connected coverage in wireless networks

Dr. Yongyi Yang
Chicago, IL, USA

for contributions to medical image recovery and analysis

Prof. Birsen Yazici
Troy, NY, USA

for contributions to synthetic aperture radar and passive imaging

Prof. Zhinong Ying
Lund, Sweden

for contributions to mobile terminal antenna technology

NEWLY ELEVATED FELLOW CLASS 2021

Dr. Dana Yoerger
Woods Hole, MA, USA

for development of autonomous underwater vehicles for deep ocean exploration and science

Dr. Jingyi Yu
Shanghai, China

for contributions to theoretical analysis, algorithms and systems for computational photography and computer vision

Prof. Junzhi Yu
Beijing, China

for contributions to bio-inspired swimming robots

Dr. Junsong Yuan
Buffalo, NY, USA

for contributions to human behavior understanding and video analytics

Dr. Shinji Yuasa
Tsukuba, Japan

for contributions to MgO-based magnetic tunnel junctions

Prof. Dong Yue
Nanjing, China

for contributions to network-based control and its applications to power systems

Dr. Chau Yuen
Singapore, Singapore

for contributions to energy efficient wireless communications

Prof. Firuz Zare
Queensland, Australia

for contribution to power converters and leadership role in standardization

Dr. Hamidreza Zareipour
Calgary, AB, Canada

for contributions to the modeling of energy storage for system operation and planning

Prof. Hongke Zhang
Beijing, China

for contributions to high-speed railway communications

Lintao Zhang
Beijing, China

for contributions to computer-aided verification with efficient Boolean satisfiability solvers

Dr. Shujun Zhang
Wollongong, Australia

for contributions to the development of advanced piezoelectrics for transducers

Prof. Xiaoping Zhang
Toronto, ON, Canada

for contributions to signal processing in finance

Dr. Gan Zheng
Loughborough, UK

for contributions to optimization and design of multiuser multi-antenna communications

Dr. Yu Zheng
Beijing, China

for contributions to spatio-temporal data mining and urban computing

NEWLY ELEVATED FELLOW CLASS 2021

Prof. Jizhong Zhu
Guangzhou, China

for application of optimization methods for real-time economic power system operation

Prof. XiaoXiang Zhu
Munich, Germany

for contributions to artificial intelligence and data science in Earth observation and global urban mapping

Thomas Zimmermann
Redmond, WA, USA

for contributions to data science in software engineering research, and practice