

2020 IEEE MEDALS AND RECOGNITIONS RECIPIENTS AND CITATIONS

1. IEEE MEDAL OF HONOR, for an exceptional contribution or an extraordinary career in IEEE fields of interest, sponsored by the *IEEE Foundation*, to

Recipient

CHENMING HU (LFIEEE)—TSMC Distinguished Professor Emeritus, Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, California, USA

Citation

"For a distinguished career of developing and putting into practice semiconductor models, particularly 3-D device structures, that have helped keep Moore's Law going over many decades."

2. **IEEE ALEXANDER GRAHAM BELL MEDAL**, for exceptional contributions to communications and networking sciences, and engineering, sponsored by *Nokia Bell Labs*, to

<u>Recipient</u>

RAJIV LAROIA (FIEEE)—Founder & CTO, Light Company, Far Hills, New Jersey, USA

Citation

"For contributions to cellular wireless data systems."

3. IEEE EDISON MEDAL, for a career of meritorious achievement in electrical science, electrical engineering or the electrical arts, sponsored by *Samsung Electronics Co., Ltd.,* to

Recipient

FREDE BLAABJERG (FIEEE)—Professor, Department of Energy Technology, Aalborg University, Aalborg, Denmark

Citation

"For contributions to and leadership in power electronics, developing a sustainable society."

4. IEEE MEDAL FOR ENVIRONMENTAL AND SAFETY TECHNOLOGIES, for

outstanding accomplishments in the application of technology in the fields of interest of IEEE that improve the environment and/or public safety, sponsored by *Toyota Motor Corporation*, to

Recipient

NANCY LEVESON (AFIEEE)—Professor of Aeronautics and Astronautics, MIT, Cambridge, Massachusetts, USA

Citation

"For contributions to software safety and for the development of system safety modeling."

5. IEEE FOUNDERS MEDAL, for outstanding contributions in the leadership, planning, and administration of affairs of great value to the electrical and electronics engineering profession, sponsored by the *IEEE Foundation*, to

<u>Recipient</u>

JEN-HSUN HUANG (nonmember)—CEO, NVIDIA, Santa Clara, California, USA

Citation

"For visionary leadership of NVIDIA and the development of GPU fueling the Artificial Intelligence revolution."

6. IEEE RICHARD W. HAMMING MEDAL, for exceptional contributions to information sciences, systems, and technology, sponsored by *Qualcomm, Inc.*, to

<u>Recipient</u>

CYNTHIA DWORK (nonmember)—Gordon McKay Professor of Computer Science, Harvard University, Cambridge, Massachusetts, USA

Citation

"For foundational work in privacy, cryptography, and distributed computing, and for leadership in developing differential privacy."

7. IEEE MEDAL FOR INNOVATIONS IN HEALTHCARE TECHNOLOGY, for

exceptional contributions to technologies and applications benefitting healthcare, medicine, and the health sciences, sponsored by the *IEEE Engineering in Medicine and Biology Society*, to

Recipient

MARK S. HUMAYUN (FIEEE)—Professor, Department of Biomedical Engineering and Ophthalmology, University of Southern California, Los Angeles, California, USA

Citation

"For contributions to the treatments of retinal neurodegenerative diseases through the use of prosthetic devices."

8. IEEE JACK S. KILBY SIGNAL PROCESSING MEDAL, for outstanding achievements in signal processing, sponsored by *Texas Instruments, Inc.*, to

Recipient

RAMALINGAM CHELLAPPA (LFIEEE)—Distinguished University Professor, Electrical and Computer Engineering, University of Maryland, College Park, Maryland, USA

Citation

"For contributions to image and video processing, especially applications to face recognition."

9. IEEE JAMES H. MULLIGAN, JR. EDUCATION MEDAL, for a career of

outstanding contributions to education in the fields of interest of IEEE, sponsored by *MathWorks, Pearson,* and the *IEEE Life Members Fund*, to

<u>Recipient</u>

LEAH JAMIESON (LFIEEE)—Ransburg Distinguished Professor of Electrical and Computer Engineering, School of Electrical and Computer Engineering, Purdue University, West Lafayette, Indiana, USA

Citation

"For contributions to the promotion, innovation, and inclusivity of engineering education."

10. IEEE JUN-ICHI NISHIZAWA MEDAL, for outstanding contributions to material and device science and technology, including practical application, sponsored by *The Federation of Electric Power Companies, Japan*, to

Recipient

PAUL DANIEL DAPKUS (FIEEE)—William M. Keck Distinguished Professor of Engineering, Professor of Electrical Engineering and Physics and Astronomy, University of Southern California, Los Angeles, California, USA

Citation

"For the development of metal organic chemical vapor deposition and quantum well lasers."

11. IEEE ROBERT N. NOYCE MEDAL, for exceptional contributions to the microelectronics industry, sponsored by *Intel Foundation*, to

<u>Recipient</u>

SUSUMU KOHYAMA (MIEEE)—President and CEO, K Associates, Inc., Tokyo, Japan

Citation

"For global executive leadership in CMOS technology development, and for standardization of design methodology and its impact on the semiconductor industry."

12. IEEE DENNIS J. PICARD MEDAL FOR RADAR TECHNOLOGIES AND

<u>APPLICATIONS</u>, for outstanding accomplishments in advancing the fields of radar technologies and their applications, sponsored by *Raytheon Company*, to

Recipient

JOSEPH R. GUERCI (FIEEE)—President/CEO, Information Systems Laboratories, Inc., La Jolla, California, USA

Citation

"For contributions to advanced, fully adaptive radar systems and real-time knowledgeaided, and cognitive radar processing architectures."

13. IEEE MEDAL IN POWER ENGINEERING, for outstanding contributions to the technology associated with the generation, transmission, distribution, application, and utilization of electric power for the betterment of society, sponsored by the *IEEE Industry Applications, Industrial Electronics, Power Electronics,* and *Power & Energy Societies,* to

Recipient

RIK W. DE DONCKER (FIEEE)—Director, RWTH Aachen University, Aachen, Germany

Citation

"For contributions to high-power and energy-conversion technologies."

14. IEEE SIMON RAMO MEDAL, for exceptional achievement in systems engineering and systems science, sponsored by *Northrop Grumman Corporation*, to

Co-Recipients

BYRANA N. SURESH (nonmember)—Honorary Distinguished Professor, Indian Space Research Organization, Karnakata, Bangalore, India

AND

K. SIVAN (nonmember)—Chairman, Indian Space Research Organization, Karnataka, Bangalore, India

<u>Citation</u>

"For outstanding leadership in developing a national space program and pioneering space technology."

15. IEEE JOHN VON NEUMANN MEDAL, for outstanding achievements in computer-related science and technology, sponsored by *IBM Corporation*, to

Recipient

MICHAEL I. JORDAN (FIEEE)—Professor, University of California, Berkeley, California, USA

Citation

"For contributions to machine learning and data science."

16. IEEE CORPORATE INNOVATION AWARD, for an outstanding innovation by an organization in an IEEE field of interest, sponsored by *IEEE*, to

<u>Recipient</u>

APPLE, INC.-Cupertino, California, USA

Citation

"For innovations in the design of high-performance and energy-efficient custom silicon for mobile applications."

17. IEEE RICHARD M. EMBERSON AWARD, for distinguished service advancing the technical objectives of the IEEE, sponsored by the *IEEE Technical Activities Board,* to

Recipient

JOHN VIG (LFIEEE)—Consultant, DARPA Microsystems Technology Office, Colts Neck, NJ, USA

Citation

"For leadership, entrepreneurship, and perseverance in founding the IEEE Sensors Council and associated technical journals."

18. IEEE HARADEN PRATT AWARD, for outstanding volunteer service to the IEEE, sponsored by the *IEEE Foundation*, to

Recipient

MARY ELLEN RANDALL (FIEEE)—Founder/CEO of Ascot Technologies, Inc., Cary, North Carolina, USA

Citation

"For advocacy of member engagement through projects, social networking, awards, service to humanity, inclusion, and outreach in support of IEEE goals."

19. IEEE HONORARY MEMBERSHIP, elected by the Board of Directors from among those individuals, not members of IEEE, who have rendered meritorious service to humanity in IEEE's designated fields of interest, sponsored by *IEEE*, to

Recipient

BORYS PATON (non-member)—President, Academician of the National Academy of Science of Ukraine, (NASU), Director of Institute of E.O. Paton Electric Welding of NASU, Kyiv, Ukraine

Citation

"For lifetime achievements within IEEE technical fields of interest in the development of

processes of electrometallurgy, materials science, electric welding of metals, and biological tissues."

20. IEEE THEODORE W. HISSEY OUTSTANDING YOUNG PROFESSIONAL

<u>AWARD</u>, for contributions to the technical community and IEEE fields of interest, sponsored by *IEEE Young Professionals, Photonics Society, Power & Energy Society*, to

Recipient

SAMPATHKUMAR VEERARAGHAVAN (MIEEE)—Technical Program Manager, Alexa Artificial Intelligence Group, Amazon, Boston, Massachusetts, USA

Citation

"For inspiring leadership, exemplary innovations, and pioneering contributions to addressing global challenges through technology-driven IEEE humanitarian programs."