



2016 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

G. DAVID FORNEY, JR. (LFIEEE)—Adjunct Professor, Department of Electrical Engineering and Computer Science and the Laboratory for Information and Decision Systems, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA

Citation

"For pioneering contributions to the theory of error-correcting codes and the development of reliable high-speed data communications."

2. [IEEE ALEXANDER GRAHAM BELL MEDAL](#), for exceptional contributions to the advancement of communications sciences and engineering, sponsored by *Nokia Bell Labs*, to

Recipient

ROBERTO PADOVANI (FIEEE)—Executive Vice President and Fellow, Qualcomm Technologies, Inc., San Diego, California, USA

Citation

"For innovations enabling efficient, wideband, wireless access to the Internet, that is central to all third-generation cellular networks."

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

ROBERT BRODERSEN (FIEEE)—Professor Emeritus, University of California, Berkeley, Berkeley, California, USA

Citation

"For contributions to integrated systems for wired and wireless communications, including wireless connectivity of personal devices."

4. [IEEE MEDAL FOR ENVIRONMENTAL AND SAFETY TECHNOLOGIES](#), for outstanding accomplishments in the application of technology in the fields of interest to IEEE that improve the environment and/or public safety, sponsored by *Toyota Motor Corporation*, to

Co-recipients

MASAHIKO MIYAKI (non-member)—Executive Vice President, DENSO Corporation, Kariya-shi, Japan

AND

YUKIHIRO SHINOHARA (non-member)—Executive Director of Electric Systems, DENSO Corporation, Kariya-shi, Japan

AND

KATSUHIKO TAKEUCHI (non-member)—Head of Diesel Business Unit, DENSO Corporation, Kariya-shi, Japan

Citation

“For development of electronic multipoint fuel-injection systems, enabling fuel-efficient and low-emission diesel engines.”

5. [**IEEE RICHARD W. HAMMING MEDAL**](#), for exceptional contributions to information sciences, systems, and technology, sponsored by *Qualcomm, Inc.*, to

Recipient

ABBAS EL GAMAL (LFIEEE)—Professor, Department of Electrical Engineering, Stanford University, Stanford, California, USA

Citation

“For contributions to network multi-user information theory and for wide ranging impact on programmable circuit architectures.”

6. [**IEEE MEDAL FOR INNOVATIONS IN HEALTHCARE TECHNOLOGY**](#), for outstanding contributions and/or innovations in engineering within the fields of medicine, biology, and healthcare technology, sponsored by the *IEEE Engineering in Medicine and Biology Society*, to

Recipient

CHARLES A. MISTRETTA (non-member)—Professor Emeritus, Departments of Medical Physics and Radiology, University of Wisconsin-Madison, Madison, Wisconsin, USA

Citation

“For the development of imaging instrumentation and techniques that have transformed the diagnosis and treatment of vascular disease.”

7. [**IEEE JACK S. KILBY SIGNAL PROCESSING MEDAL**](#), for outstanding achievements in signal processing, sponsored by *Texas Instruments, Inc.*, to

Recipient

LOUIS SCHARF (LFIEEE)—Research Professor of Mathematics and Emeritus Professor of Electrical and Computer Engineering, Colorado State University, Fort Collins, Colorado, USA

Citation

“For pioneering and sustained contributions to statistical signal processing and its practice.”

8. [**IEEE/RSE JAMES CLERK MAXWELL MEDAL**](#), for groundbreaking contributions that have had an exceptional impact on the development of electronics and electrical engineering or related fields, sponsored by *IEEE*, to

Recipient

GEOFFREY HINTON (non-member)—Distinguished Emeritus Professor, Department of Computer Science, University of Toronto, Toronto, Ontario, Canada, and Distinguished Researcher, Google, Inc., Mountain View, CA, USA

Citation

“For pioneering and sustained contributions to machine learning, including developments in deep neural networks.”

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

Recipient

SIMON HAYKIN (LFIEEE)—Distinguished University Professor, Electrical and Computer Engineering Department, McMaster University, Hamilton, Ontario, Canada

Citation

“For contributions to engineering education in adaptive signal processing and communication.”

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

MASAYOSHI ESASHI (MIEEE)—Professor, Tohoku University, Sendai, Miyagi, Japan

Citation

“For pioneering contributions to micro-electro-mechanical systems (MEMS), and their uses in automobiles, cellular phones, industrial equipment, and medical devices.”

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

Recipient

TAKUO SUGANO (LFIEEE)—Professor Emeritus, University of Tokyo, Tokyo, Japan

Citation

“For contributions to and leadership in the research and development of the science and technology of semiconductor devices.”

12. [IEEE DENNIS J. PICARD MEDAL FOR RADAR TECHNOLOGIES AND APPLICATIONS](#), for outstanding accomplishments in advancing the fields of radar technologies and their applications, sponsored by *Raytheon Company*, to

Recipient

NADAV LEVANON (LFIEEE)—Professor Emeritus, Faculty of Engineering, Tel Aviv University, Tel Aviv, Israel

Citation

“For contributions to radar signal design and analysis, pulse compression, and signal processing.”

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

ARUN G. PHADKE (LFIEEE)—University Distinguished Research Professor, Faculty of Engineering, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA

Citation

“For contributions to synchrophasor technology for monitoring, control, and protection of electric power systems.”

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

Co-recipients

JOHN P. LEHOCZKY (LMIEEE)—Thomas Lord University Professor of Statistics and Mathematical Sciences, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA

AND

RAGUNATHAN RAJKUMAR (FIEEE)—George Westinghouse Professor, Department of Electrical and Computer Engineering, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA

AND

LUI SHA (LFIEEE)—Donald B. Gillies Chair Professor, Computer Science, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA

Citation

"For technical leadership and contributions to fundamental theory, practice, and standardization for engineering real-time systems."

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

Recipient

CHRISTOS H. PAPADIMITRIOU (non-member)— C. Lester Hogan Professor, Department of Electrical Engineering and Computer Science, University of California, Berkeley, Berkeley, California, USA

"For providing a deeper understanding of computational complexity and its implications for approximation algorithms, artificial intelligence, economics, database theory, and biology."

16. [IEEE CORPORATE INNOVATION AWARD](#), for an outstanding and exemplary innovation by an industrial entity, governmental or academic organization, or other corporate body, within the fields of interest to the IEEE, sponsored by *IEEE*, to

Recipient

INTEL CORPORATION—Hillsboro, Oregon, USA

Citation

"For pioneering the use of high-k metal gate and tri-gate transistor technologies in high-volume manufacturing."

17. [IEEE ERNST WEBER MANAGERIAL LEADERSHIP AWARD](#), for exceptional managerial leadership in the fields of interest to the IEEE, sponsored by *IEEE*, to

Recipient

DAVID FAIRBANK WELCH (FIEEE)—President, Infinera Corporation, Sunnyvale, California, USA

Citation

"For leadership in enabling the growth of cloud-based services and the Internet in optical transport networks."

18. [IEEE RICHARD M. EMBERSON AWARD](#), for distinguished service to the development, viability, advancement, and pursuit of the technical objectives of IEEE, sponsored by the *IEEE Technical Activities Board*, to

Recipient

STEPHEN WEINSTEIN (LFIEEE)—President, Communication Theory and Technology Consulting, New York, New York, USA

Citation

"For contributions to IEEE Publications, Awards, and globalization."

19. [IEEE HARADEN PRATT AWARD](#), for outstanding service to the IEEE, sponsored by the *IEEE Foundation*, to

Recipient

MOSHE KAM (FIEEE)—Dean of the Newark College of Engineering, New Jersey Institute of Technology, Newark, New Jersey, USA

Citation

"For original and high-impact contributions to IEEE's Educational Activities, expanding IEEE's global reach and effectiveness."

20. [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

Recipients (2)

SERGE HAROCHE (non-member)—Professor and Chair, Quantum Physics, Collège de France, Paris, France

Citation

"For the development of cavity quantum electrodynamics, leading to fundamental quantum physics studies and to a wide range of applications."

RODOLFO ZICH (non-member)—President, Torino Wireless Foundation and President, Istituto Superiore Mario Boella, Torino, Italy

Citation

"For leadership in the global integration of electrical and electronics engineering education and research."