

**IEEE JACK S. KILBY SIGNAL PROCESSING MEDAL  
RECIPIENTS**

2022     DAVID L. DONOHO (FIEEE)— Anne T. and Robert M. Bass Professor of Humanities and Sciences, Professor of Statistics, Department of Statistics, Stanford University, Stanford, California, USA     “For groundbreaking contributions to sparse signal recovery and compressed sensing.”

2021     EMMANUEL CANDÈS (nonmember)—The Barnum-Simons Chair in Mathematics and Statistics, Stanford University, Stanford, California, USA     “For groundbreaking contributions to compressed sensing.”

AND

TERENCE TAO (nonmember)—Professor, Department of Mathematics, University of California, Los Angeles, California, USA

AND

JUSTIN ROMBERG (FIEEE)—Schlumberger Professor and the Associate Chair for Research, School of Electrical and Computer Engineering; and Associate Director for the Center for Machine Learning, Georgia Institute of Technology, Atlanta, Georgia, USA

2020     RAMALINGAM CHELLAPPA Distinguished University Professor, Electrical and Computer Engineering, University of Maryland, College Park, Maryland, USA     “For contributions to image and video processing, especially applications to face recognition.”

2019     ALAN WILLSKY Edwin S. Webster Professor of EECS, Massachusetts Institute of Technology, Cambridge, Massachusetts,     “For contributions to stochastic modeling, multi-resolution techniques, and control-signal processing synergies.”

**IEEE JACK S. KILBY SIGNAL PROCESSING MEDAL  
RECIPIENTS**

USA

- |      |   |   |
|------|---|---|
| 2018 | BEDE LIU<br>Professor Emeritus<br>Department of Electrical<br>Engineering, Princeton<br>University, Princeton, New<br>Jersey, USA   | "For sustained contributions to the analysis<br>and the development of low-complexity<br>realizations of digital signal processing<br>algorithms."                  |
| 2017 | MARTIN VETTERLI<br>Professor, EPFL, Lausanne,<br>Switzerland  | "For fundamental contributions to advanced<br>sampling, signal representations, and<br>multirate and multiresolution signal<br>processing."                         |
| 2016 | LOUIS L. SCHARF<br>Research Professor of<br>Mathematics and Emeritus<br>Professor of Electrical and<br>Computer Engineering,<br>Colorado State University,<br>Fort Collins, Colorado, USA | "For pioneering and sustained contributions<br>to statistical signal processing and its<br>practice."   |
| 2015 | HARRY L. VAN TREES<br>University Professor Emeritus<br>Affiliation, George Mason<br>University, Stanardsville,<br>Virginia, USA   | "For fundamental contributions to detection,<br>estimation, and modulation theory; sensor<br>array processing; and Bayesian bounds."                                |
| 2014 | THOMAS P. BARNWELL, III<br>Professor Emeritus, Georgia<br>Institute of Technology,<br>Vinnings, Georgia, USA  | "For leadership in and contributions to speech<br>processing, filter banks and wavelets, DSP<br>hardware and architectures, and technology-<br>enhanced education." |
| 2013 | BISHNU S. ATAL<br>Affiliate Professor, Electrical<br>Engineering Department,<br>University of Washington,<br>Seattle, WA, USA   | "For fundamental and pioneering<br>contributions to speech coding."   |
| 2012 | CLIFFORD CARTER<br>(Retired), U.S. Navy's Senior<br>Technologist (ST) for<br>Acoustic Signal Processing,<br>Naval Undersea Warfare<br>Center (NUWC) Division<br>Newport, Newport, RI, USA | "For contributions to the fundamentals of<br>coherence and time-delay estimation and to<br>underwater acoustics signal processing."                                 |
| 2011 | INGRID DAUBECHIES   | "For pioneering contributions to the theory   |

**IEEE JACK S. KILBY SIGNAL PROCESSING MEDAL  
RECIPIENTS**

- Professor, William R. Kenan, Jr., Department of Mathematics and Program for Applied Mathematics, Princeton University, Princeton, NJ, USA and applications of wavelets and filter banks."
- 2010 RONALD SCHAFER  
HP Fellow, Hewlett Packard, Palo Alto, CA, USA "For leadership and pioneering contributions to the field of digital signal processing."
- 2009 CHARLES SIDNEY BURRUS  
Dean (Emeritus), Rice University College of Eng., Houston, TX, USA "For contributions to Fast Fourier Transform algorithms, digital filter design, and signal processing education."
- 2008 ROBERT M. GRAY  
Lucent Technologies Prof. of Engineering, EE Dept Stanford Univ., Stanford, CA, USA "For contributions to vector quantization and signal compression techniques."
- 2007 ALAN V. OPPENHEIM  
Ford Professor of Engineering, MIT, Department of EECS, Cambridge, MA, USA "For visionary leadership and exceptional contributions to the field of digital signal processing."
- 2006 THOMAS KAILATH  
Hitachi America Prof. of Engineering, Emeritus, Dept of EE, Stanford University, Stanford, CA, USA "For seminal contributions to the theory and applications of statistical signal processing."
- 2005 FUMITADA ITAKURA  
Prof., Meijo University, Nagoya, Japan "For pioneering contributions to narrow-band speech coding."
- 2004 THOMAS W. PARKS  
Prof., School of Electrical Eng, Cornell Univ., Ithaca, NY, USA "For fundamental contributions to digital filter design and interpolation, especially the Parks-McClellan algorithm."
- AND JAMES H. McCLELLAN  
Prof., School of Electrical and Computer Engineering Georgia Institute of Tech.

**IEEE JACK S. KILBY SIGNAL PROCESSING MEDAL  
RECIPIENTS**

Atlanta, GA, USA

- |      |  |   |
|------|--|---|
| 2003 | HANS W. SCHUESSLER<br>Professor Emeritus<br>Univ. of Erlangen-Nuernberg<br>Erlangen, Germany | "For his role in the early development of the field of Digital Signal Processing, especially the theory, design, and implementation of analog and digital filters." |
| 2002 | JAMES W. COOLEY<br>Consultant, South Kingstown,<br>RI, USA                                   | "For pioneering the Fast Fourier Transform (FFT) algorithm."  |
| 2001 | THOMAS S. HUANG<br>Faculty Member, Univ of<br>Illinois<br>Urbana-Champaign, IL, USA          | "For pioneering and sustained contributions to image sequence processing and its applications to digital TV, to pattern recognition, and to computer animation."    |
| AND  | ARUN N. NETRAVALI<br>President, Bell Labs, NJ, USA   |   |
| 2000 | JAMES F. KAISER<br>Duke University<br>Durham, NC, USA  | "For his pioneering contributions in digital filter design and implementations, and his role in the early development of the field of Digital Signal Processing."   |
| 1999 | LAWRENCE R. RABINER<br>AT&T Labs<br>Florham Park, NJ, USA                                    | "For far-reaching impact on the fields of digital signal processing and automatic speech recognition, through leadership, research, and education."                 |
| 1998 | THOMAS G. STOCKHAM<br>University of Utah<br>Salt Lake City, UT, USA                          | "For pioneering the field of digital audio processing"  |
| 1997 | BERNARD GOLD<br>MIT Lincoln Laboratory,<br>Lexington, MA, USA                                | "For pioneering research in digital signal processing fundamentals, in speech signal processing, and for their landmark signal processing text."                    |
| AND  | CHARLES M. RADER<br>MIT Lincoln Laboratory,<br>Lexington, MA, USA                            |   |