Award Coordinators

Awards and Recognition Coordinator ........................................... David V. Kerns Jr.

Awards Committee Chairs

Frontiers in Education Conference
FIE Ronald J. Schmitz Award.................................................. David L. Soldan

IEEE Education Society
IEEE ES Hewlett-Packard/Harriett B. Rigas Award ..................... Sherra E. Kerns
IEEE ES McGraw-Hill/Jacob Millman Award................................ James R. Rowland
IEEE ES Meritorious Service Award........................................... Edwin C. Jones Jr.
IEEE ES Achievement Award .................................................. Chalmers F. Sechrist
IEEE Transactions on Education Best Paper Award ....................... David A. Conner
IEEE Fellow Award ..................................................................... Mario J. Gonzalez

ASEE ERM Division
ASEE ERM Division Distinguished Service Award ....................... Daniel J. Moore

IEEE Computer Society
IEEE CS Undergraduate Teaching Award ..................................... Oscar N. Garcia

ASEE ECE Division
Hewlett-Packard Frederick Emmons Terman Award ....................... Zoya Popovic

Sponsoring Organizations

IEEE Education Society
Marion O. Hagler, President
John A. Orr, FIE 2002 General Chair
Burks Oakley II, Program Co-chair

ASEE Educational Research and Methods Division
Daniel J. Moore, Division Chair
P.K. Imbrie, Program Co-chair

IEEE Computer Society
Willis K. King, President
Allen S. Parish, Program Co-chair
Awards Ceremony Agenda

Moderator: David V. Kerns Jr., Vice President
IEEE Education Society

ASEE ECE Division Hewlett-Packard Frederick Emmons Terman Award
Presenter: Wayne C. Johnson
Hewlett-Packard Corporation

IEEE Computer Society Undergraduate Teaching Award
Presenter: Willis K. King, President
IEEE Computer Society

ASEE ERM Division Distinguished Service Award
Presenter: Daniel J. Moore, Chair
ASEE ERM Division

IEEE Education Society Meritorious Service Award
Presenter: Marion O. Hagler, President
IEEE Education Society

IEEE Education Society Achievement Award
Presenter: Marion O. Hagler, President
IEEE Education Society

IEEE Education Society McGraw-Hill/Jacob Millman Award
Presenter: Marion O. Hagler, President
IEEE Education Society

IEEE Education Society Transactions on Education Best Paper Award
Presenter: Marion O. Hagler, President
IEEE Education Society

IEEE Education Society Hewlett-Packard/Harriett B. Rigas Award
Presenter: Wayne C. Johnson
Hewlett-Packard Corporation

IEEE Fellow Award
Presenter: Marion O. Hagler, President
IEEE Education Society

Frontiers in Education Conference Ronald J. Schmitz Award
Presenter: David L. Soldan, Chair
FIE Ronald J. Schmitz Award Committee
Theodore S. Rappaport
The William and Bettye Nowlin Chair of Engineering
Director of the Wireless Networking and Communications Group
University of Texas–Austin
Austin, Texas

Past Recipient
’00 Sergio Verdu
’01 Zoya Popovic

Theodore S. Rappaport is a teacher, researcher, and entrepreneur who holds BSEE, MSEE, and PhD degrees from Purdue University. From 1988 to 2002 he was the James S. Tucker professor and founder of the Mobile & Portable Radio Research Group in the Department of Electrical and Computer Engineering at Virginia Tech. He joined the University of Texas in 2002 as the William and Bettye Nowlin chair in engineering and is director of the new Wireless Networking and Communications Group at UT’s Austin campus.

Rappaport founded TSR Technologies, Inc., in 1989 and Wireless Valley Communications, Inc., in 1995. He received the Marconi Young Scientist Award in 1990, an NSF Presidential Faculty Fellowship in 1992, and the James R. Evans Avant Garde Award from the IEEE Vehicular Technology Society in 2002. He has 30 patents issued or pending and has authored, co-authored, and co-edited 18 books in the wireless field. He has co-authored more than 200 technical journal and conference papers and was recipient of the 1999 IEEE Communications Society Stephen O. Rice Prize Paper Award.

Since 1998 he has been series editor for the Prentice Hall Communications Engineering and Emerging Technologies book series. He is on the editorial board of International Journal of Wireless Information Networks (Plenum Press, N.Y.) and the advisory board of Wireless Communications and Mobile Computing for Wiley InterScience. Rappaport is a fellow of the IEEE and is active in the IEEE Communications and Vehicular Technology societies.

ASEE ECE Division
Hewlett-Packard Frederick Emmons Terman Award
Presented by Wayne C. Johnson

“For an outstanding young electrical engineering educator in recognition of his or her contribution to the profession.”
IEEE Computer Society
Undergraduate Teaching Award for 2001

Presented by Willis K. King

“For improving design education at the undergraduate level through course and curriculum development and through innovative research in and application of educational delivery technology.”

David G. Meyer holds BS and MSE degrees in electrical engineering, an MS in computer science, and a PhD in electrical engineering, all from Purdue University. In 1982 he joined the School of Electrical and Computer Engineering at Purdue, where he is a professor specializing in information technology, embedded system design, advanced architecture microprocessors, and electro-acoustics.

Meyer is a member of IEEE, the Audio Engineering Society, the Association of Computing Machinery, and ASEE. He was the 1993–94 national president of Eta Kappa Nu and has served on its board of directors.

He has won numerous teaching awards, including three national awards: the Eta Kappa Nu C. Holmes MacDonald Outstanding Teaching Award, the IEEE Undergraduate Teaching Award, and the ASEE Fred Merryfield Design Award.

He has published technical papers on computer architecture, use of information technology in engineering education, and electro-acoustics. He has authored book chapters on advanced architecture microprocessors and is developing a textbook, Microcontroller-Based Digital System Design.

“For outstanding contributions to undergraduate education in the areas of algorithms and discrete mathematics and for influential textbook and software.”

Steven Skiena is professor of computer science at the State University of New York–Stony Brook. He is the author of three popular books: The Algorithm Design Manual; the EDUCOM award-winning Computational Discrete Mathematics (new edition forthcoming from Cambridge University Press); and Calculated Bets: Computers, Gambling, and Mathematical Modeling to Win. He received the ONR Young Investigator’s Award and the Chancellor’s Award for Excellence in Teaching at Stony Brook.

His research includes discrete mathematics and its applications, particularly the design of graph, string, and geometric algorithms.
IEEE Computer Society
Undergraduate Teaching Award for 2002

Presented by Willis K. King

“For teaching excellence reflected in textbooks with major impact on computer architecture education and for leadership in the CS International Design Competition, focusing international attention on undergraduate computer systems design.”

Alan Clements is professor in the School of Computing at the University of Teesside, England, where he teaches computer architecture. He graduated in electronics from the University of Sussex and holds a PhD in data transmission from Loughborough University.

He is on the board of governors of the IEEE Computer Society. He is a member of the society’s Educational Activities and Press Activities boards and has served on the Publications Board. He is on the editorial boards of IEEE Annals of the History of Computing and Microprocessors and Microsystems, and chairs the society’s International Design Competition. In May 2000 he was guest editor of IEEE Micro when its theme was computer architecture education.

Clements is active in curriculum design, has written papers on the future of computer architecture education, has worked with a consortium of American and European universities to exchange students, is involved with the society/ACM Computing Curriculum 2001 project, and is developing Internet-based courses for distance learning. He has written more than 10 books on computer architecture and microprocessor systems design.

His consultancies include work for the European Union, the United Kingdom government, Hitachi, and Sega. In 1993 he was awarded a personal chair sponsored by the Motorola Corporation.
Karl A. Smith
The Morse-Alumni Distinguished Professor of Civil Engineering
University of Minnesota
Minneapolis, Minnesota
Michigan State University
Lansing, Michigan

Past Recipients
'95 Wallace S. Venable
'96 James E. Stice
'98 Billy V. Koen
   Alisha A. Waller
'99 John C. Lindenlaub
'00 Richard S. Culver
'01 Charles F. Yokomoto

ASEE ERM Division Distinguished Service Award
Presented by Daniel J. Moore
“For outstanding service to the ASEE Education and Research Methods Division.”

Karl A. Smith is the Morse-Alumni distinguished professor of civil engineering at the University of Minnesota. His principal research area is the role of collaboration and cooperation in learning and design. His appointment is split between the University of Minnesota and Michigan State University, where he works with faculty in the Lilly Teaching Fellows Program, the College of Agriculture and Natural Resources, the College of Natural Science, and the College of Engineering. He holds bachelor’s and master’s degrees in metallurgical engineering from Michigan Technological University and a PhD in educational psychology from the University of Minnesota.

Smith has been co-coordinator for the Bush Faculty Development Program for Excellence and Diversity in Teaching and associate director for education at the Center for Interfacial Engineering at the University of Minnesota, a member of the board of directors of Collaboration for the Advancement of College Teaching and Learning, and chair of the Educational Research and Methods Division of the American Society for Engineering Education. He was elected a fellow of ASEE in 1998.

He has published widely on the active learning strategies of cooperative learning and structured controversy, knowledge representation and expert systems, and instructional uses of personal computers. He teaches building models to solve problems; civil engineering systems (decision engineering, network analysis, linear programming, simulation, and expert systems); and project management and leadership. He conducts workshops on active and cooperative learning, problem formulation and modeling, project management and teamwork, and building small expert systems.
IEEE Education Society
Meritorious Service Award
Presented by Marion O. Hagler

“For contributions to the Education Society through service to the Frontiers in Education Conference, to the Society Newsletter, The Interface, and for inspiring leadership in engineering education.”

James R. Rowland is professor of electrical engineering at the University of Kansas. He has previous faculty experience at Georgia Tech and Oklahoma State University.

Rowland served the IEEE Education Society as president, vice president, and secretary in the early 1980s; served the IEEE educational, technical, and regional activities boards as EAB’s awards and recognition chair in the mid-1980s; and was IEEE admission and advancement committee chair in the late 1990s. He has represented IEEE as an ABET program evaluator on about 20 visits since 1985. He is an associate editor for controls education for the IEEE Transactions on Education.

Rowland has received the IEEE Centennial Medal, the Education Society Achievement Award, the Ronald J. Schmitz FIE Conference Award, and the Region 5 Outstanding Educator Award. He was elected a fellow of IEEE in 1995.

James R. Rowland
Professor of Electrical Engineering
University of Kansas
Lawrence, Kansas

Past Recipients
‘78 Warren B. Boast
‘79 Joseph M. Biedenbach
‘80 Edwin C. Jones Jr.
‘81 Lyle D. Feisel
‘82 Roy H. Mattson
‘83 Robert F. Fontana
‘84 Gerald R. Peterson
‘85 Luke H. Noggle
‘86 James A. Mulligan
Sidney S. Shamis
‘87 Thomas K. Gaylord
‘88 Robert F. Cotellessa
‘89 E. Ben Peterson
‘90 Darrell L. Vines
‘91 Victor K. Schutz
‘92 William K. LeBold
‘93 Frank S. Barnes
‘94 Patricia D. Daniels
‘95 Robert W. Ritchie
‘96 Marion O. Hagler
Donald E. Kirk
‘97 Robert Sullivan
‘98 Burks Oakley II
‘99 Gerald L. Engel
‘00 Ted E. Batchman
‘01 William Sayle
Burks Oakley II
Associate Vice President
for Academic Affairs
University of Illinois
Urbana, Illinois

Past Recipients
'79 Lawrence P. Grayson
'80 Demetrius T. Paris
'81 Lindon E. Saline
'82 Anthony B. Giordano
'83 Joseph Bordogna
'84 John C. Lindenlaub
'85 John D. Ryder
'86 James R. Rowland
'87 Bruce Eisenstein
'88 Mac Van Valkenburg
'89 Edward W. Ernst
'90 Ernst Weber
'91 J. David Irwin
'92 Jerrier A. Haddad
'93 Chalmers F. Sechrist
'94 Eric A. Walker
'95 Stephen W. Director
'96 William H. Hayt Jr.
'97 Jerry R. Yeargan
'98 Ted E. Batchman
'99 Lyle D. Feisel
'00 Irene C. Peden
'01 Donald E. Kirk
Eli Fromm

IEEE Education Society Achievement Award
Presented by Marion O. Hagler
“For sustained contributions to engineering education and the IEEE Education Society.”

Burks Oakley II is associate vice president for academic affairs at the University of Illinois and director of University of Illinois Online. He also is a professor in the Department of Electrical and Computer Engineering at the University of Illinois–Urbana-Champaign (UIUC).

Through his innovative use of technology in teaching, Oakley has earned a national reputation as a practitioner and promoter of online education. In the past six years he has given more than 200 invited talks at national conferences and on university campuses. His other major projects include the Illinois Online Network and the Illinois Virtual Campus.

Oakley holds a BS degree from Northwestern University and MS and PhD degrees from the University of Michigan. He was a program co-chair for the FIE conferences in 1997 and 2002 and he initiated the FIE New Faculty Fellows program in 1997.

Oakley has received numerous awards for his teaching and innovative use of technology in education, including the Luckman Distinguished Undergraduate Teaching Award from UIUC in 1993, the Outstanding Teacher Award from the ASEE IL/IN Section in 1993, the Benjamin Dasher Award from FIE in 1994, the Helen Plants Award from FIE in 1995, the Educom Medal in 1996, the IEEE Educational Activities Board Major Educational Innovation Award in 1996, the Meritorious Service Award from the IEEE Education Society in 1998, and the IEEE Third Millennium Medal in 2000. He is a fellow of the IEEE and the ASEE and a former vice president of ASEE.
IEEE Education Society
McGraw-Hill/Jacob Millman Award

Presented by Marion O. Hagler

“For outstanding contributions to electrical engineering education through textbooks, research, and mentoring of students.”

John G. Proakis is adjunct professor at the University of California–San Diego and professor emeritus at Northeastern University, where he was a faculty member from 1969 through 1998 and held a variety of positions, including associate dean and interim dean of the College of Engineering, director of the Graduate School of Engineering, and chair of the Department of Electrical and Computer Engineering.

Before joining Northeastern University, he worked at GTE Laboratories and the MIT Lincoln Laboratory. His professional experience and interests are in digital communications and digital signal processing. He researches in digital communications and digital signal processing and has taught undergraduate and graduate courses in communications, circuit analysis, control systems, probability, stochastic processes, circuit analysis, control systems, probability, stochastic processes, and digital signal processing.


Proakis is a fellow of IEEE. He holds five patents and has published more than 200 papers.
Mohan Krishnan is professor of electrical and computer engineering at the University of Detroit Mercy. He holds a BTech degree from the Indian Institute of Technology (Madras, India); an MTech degree from the Indian Institute of Technology (Kanpur, India); and a PhD from the University of Windsor (Ontario, Canada).

Apart from engineering education, his interests include digital signal processing, in particular its application to pattern recognition problems involving both 1-D and 2-D signals such as voice and handwritten signature authentication, computational intelligence, and mechatronic systems.

Mark Paulik is professor of electrical and computer engineering at the University of Detroit Mercy. He holds a BEE from the University of Detroit Mercy, an SM from the Massachusetts Institute of Technology, and a PhD from Oakland University.

His research interests include engineering education, digital signal and image processing, and real-time embedded system design. His recent efforts have focused on engineering design pedagogy, the analysis of online handwritten signatures using Hidden Markov Models, and System on a Chip FPGAs. He is a senior member of IEEE.

IEEE Education Society Transactions on Education Best Paper Award
Presented by Marion O. Hagler

Mohan Krishnan is professor of electrical and computer engineering at the University of Detroit Mercy. He holds a BTech degree from the Indian Institute of Technology (Madras, India); an MTech degree from the Indian Institute of Technology (Kanpur, India); and a PhD from the University of Windsor (Ontario, Canada).

Apart from engineering education, his interests include digital signal processing, in particular its application to pattern recognition problems involving both 1-D and 2-D signals such as voice and handwritten signature authentication, computational intelligence, and mechatronic systems.

Mark Paulik is professor of electrical and computer engineering at the University of Detroit Mercy. He holds a BEE from the University of Detroit Mercy, an SM from the Massachusetts Institute of Technology, and a PhD from Oakland University.

His research interests include engineering education, digital signal and image processing, and real-time embedded system design. His recent efforts have focused on engineering design pedagogy, the analysis of online handwritten signatures using Hidden Markov Models, and System on a Chip FPGAs. He is a senior member of IEEE.

Past Recipients
‘99 J.A. Buck
H. Owen
J.P. Uyemura
C.M. Verber
D.J. Blumenthal
‘00 David J. Russomanno
Ronald D. Bonnell
‘01 Christopher W. Trueman
Nan Marie Jokerst is the Joseph M. Pettit professor of optoelectronics in the School of Electrical and Computer Engineering at the Georgia Institute of Technology. She holds a PhD from the University of Southern California in semiconductor optical nonlinearities. She was an American Education Association/Hewlett-Packard Fellow and a Newport Research Award winner while at USC and a summer intern at the IBM Watson Laboratories in 1982 and 1983.

She joined the faculty of Georgia Tech in 1989 and won a DuPont Young Faculty Award, a National Science Foundation Presidential Young Investigator Award, Best Teacher in Electrical Engineering Award at Georgia Tech, and two other teaching awards. She is the thrust leader for optoelectronics in the NSF Electronic Packaging Research Center. She has published and presented more than 175 papers and three book chapters and has three patents awarded, two pending, and five more invention disclosures.

Jokerst is a fellow of the Optical Society of America and served on the OSA board of directors as chair of the Engineering Council and on the IEEE Lasers and Electro-Optic Society (LEOS) board of governors as an elected member and as vice president of conferences for IEEE LEOS. She has also been elected chair, vice chair, secretary, and treasurer of the Atlanta IEEE section and received an IEEE Third Millennium Medal.

She focuses her teaching on undergraduate required courses and currently team-teaches a hands-on design, build, and test Capstone Senior Design Course investigating gigabit Ethernet fiber optic links. She has also mentored a large number of both undergraduate and graduate students through her collaborative, multidisciplinary integrated optoelectronics research group, and focuses on increasing diversity in electrical engineering.
Ted Batchman holds BSEE, MSEE, and PhD degrees from the University of Kansas. After completing his PhD, he joined LTV Missiles and Space Division as a scientific engineering senior specialist working on space defense systems. In 1970 he joined the University of Queensland in Brisbane, Australia, as a senior lecturer. His research and teaching were in fiber optics and integrated optical devices.

Batchman joined the University of Virginia in 1975 and continued his teaching and research in fiber optics and integrated optics with sponsorship from NASA and other government agencies. He also developed and patented a miniature electromagnetic field measurement probe for biomedical measurements. In 1988 he joined the University of Oklahoma as director of the School of Electrical Engineering and Computer Science. He developed a new computer science school and new programs in electrical engineering, including an extensive program in electric vehicle research, before joining UNR. In July 1995 he joined UNR as dean of the College of Engineering.

He is a fellow of IEEE, a member of the IEEE EAB, chair of the EAB Pre-college Education Committee, a member of the IEEE Education Society AdCom, and former editor-in-chief of the IEEE Transactions on Education. He received the IEEE Third Millennium Medal, the IEEE Education Society Meritorious Service Award and the Education Society Achievement Award.

James Roberts holds BS, MS, and PhD degrees in electrical engineering from the University of Kansas, MIT, and Santa Clara University, respectively. He began his career with RCA on Boston’s Route 128 as an electronic design engineer in the Apollo program. In 1969 he joined ESL, Inc., a start-up company in California’s Silicon Valley. He was promoted through the ranks to become manager of the Communications and Radar Laboratory in 1980.

He taught part-time at Santa Clara from 1978 to 1983. Following TRW’s acquisition of ESL, he was named TRW station manager at the Aerospace Data Facility in Denver. His leadership was instrumental in ADF’s winning the U.S. government worldwide Outstanding Field Station Award in 1987. He was named manager of TRW Denver Operations that year.

In 1990 Roberts became chair of the Electrical Engineering and Computer Science Department at the University of Kansas, a post he held until December 1997, when he was promoted to his current position. His principal teaching and research interests are wireless telecommunications.

Roberts is a member of U.S. Senator Pat Roberts’ Science and Technology Advisory Committee and is on the board of the International Engineering Consortium, Inc. He was elected secretary-treasurer of the National EE Department Heads Association. He is on the IEEE Admissions and Advancement Working Group and was a member of the IEEE Education Society AdCom. He has been active in the FIE Steering Committee, program co-chair for FIE ’98, and general chair for FIE ’00.
After completing her PhD studies at Clarkson University, Goranka Bjedov took a position at Purdue University, where she taught computer classes in the Department of Freshman Engineering and the School of Civil Engineering. Her research at Purdue included multiphase flow modeling on large-scale parallel computers, engineering education, and information security. At Purdue she authored two textbooks, numerous conference and journal papers and presentations, and several invited talks and lectures at conferences and universities around the country.

In 1995 Bjedov collaborated with Daniel Budny and Jay Perry in producing the first electronic conference proceedings for Frontiers in Education. This successful collaboration continues.

She left Purdue in 1998 to join the AT&T Labs-Internet Platform Technology Organization in San Jose, California. Her initial appointment was in the Office of the Chief Scientist but soon took the quality assurance position, where her primary responsibilities included all aspects of performance, security, and API quality assurance. Her research interest then shifted to software engineering, with a focus on processes and techniques for creating quality software.

After several years at AT&T, Bjedov joined Network Appliance in the position of quality assurance adviser and architect. She develops new tools and techniques for improving the quality of software, and presents programming and quality assurance seminars.