2021 IEEE Education Society Awards

James J. Sluss, Jr., Awards Committee Co-Chair, Russ Meier, Awards Committee Co-Chair, and Steve E. Watkins, VP Educational Activities & Awards

IEEE Education Society

ERE, we continue the tradition, begun in 2005, of publishing the award descriptions and their recipients in the IEEE TRANSACTIONS ON EDUCATION, [A1]–[A17], in order to present the increasingly important research and development in engineering education.

I. IEEE WILLIAM E. SAYLE II AWARD FOR ACHIEVEMENT IN EDUCATION

This award is given to a member of the IEEE Education Society to recognize significant contributions over a period of years in the fields of interest to the society.

The 2021 IEEE William E. Sayle II Award for Achievement in Education was presented to *Rosanna Y.-Y. Chan*, "for her contributions to the field of learning technologies for special education needs."



Rosanna Y.-Y. Chan received the B.Eng., M.Phil., and Ph.D. degrees in information engineering and the M.Ed. degree in education psychology from the Chinese University of Hong Kong, Hong Kong.

She is currently a Senior Research Scientist with the Centre for Perceptual and Interactive Intelligence and an Adjunct Assistant Professor with the Department of Information Engineering, Chinese University of Hong Kong. She has a multidisciplinary background in information engineering, educational psychology, and learning sciences. Her

research interests include human-computer interaction and learning technologies. She has designed and implemented a number of systems for users with special needs.

Dr. Chan is the Founding Chair of the Hong Kong Chapter and also the Founding Co-Chair of the Technical Committee in Learning Sciences of the IEEE Education Society.

II. IEEE EDUCATION SOCIETY DISTINGUISHED MEMBER AWARD

This award is given to a member of the IEEE Education Society for outstanding, long-term service and dedication to the IEEE Education Society and unique contributions to electrical engineering pedagogy.

The 2021 IEEE Education Society Distinguished Member Award was presented to *Mani Mina*, "to recognize outstanding long-term service to the IEEE Education Society and significant contributions in fields of interest to the IEEE."



Mani Mina (Senior Member, IEEE) received the B.S. and M.S. degrees in physics and the M.S. and Ph.D. degrees in electrical engineering from Iowa State University, Ames, IA, USA, in 1982, 1985, 1987, and 1989, respectively.

He is an Associate Professor with the Department of Electrical and Computer Engineering and the Department of Industrial Design, Iowa State University. He has research experience in microelectronics and device physics, nondestructive evaluation, instrumentation, networking, and physical-layer

challenges, as well as high-speed systems engineering and magneto-optical systems. He has industrial experience in the areas of instrumentation, system integration, and design in nondestructive evaluation and handheld systems. He is also engaged in research in engineering education. As a reflective practitioner, he has been working on ways of creating new approaches to bring cycles of empathy in engineering educations.

Dr. Mina has won numerous awards, such as Meritorious Awards for his contributions and innovations in ASEE Electrical and Computer Engineering as well as ASEE Technological and Engineering Literacy and Philosophy of Engineering Divisions.

III. IEEE EDUCATION SOCIETY EDWIN C. JONES, JR., MERITORIOUS SERVICE AWARD

This award is given to a member of the IEEE Education Society to recognize pioneering contributions to the administrative efforts of the IEEE Education Society over a period of years.

The 2021 IEEE Education Society Edwin C. Jones, Jr., Meritorious Award was presented to *Maria Mercedes Larrondo-Petrie*, "for sustained pioneering contributions to the IEEE Education Society in standards development, international accreditation, and globalization."



Maria Mercedes Larrondo-Petrie is a Full Professor of Computer Engineering with Florida Atlantic University, Boca Raton, FL, USA. She is a Founder and the Executive Director of the Latin American and Caribbean Consortium of Engineering Institutions. She works very closely with the Organization of American States (OAS) on the Ministers of Science and Technology Working Group 2: Human Capacity Building, organizes the annual OAS Summit of Engineering for the Americas and is the Director of OAS Center of

Excellence of Engineering for the Americas. She has a 24 H-index and a 52 i10-index with over 250 refereed publications receiving over 1700 citations. She has been awarded more than three million dollars in grants over her career. Her research interests focus on global engineering education, engineering learning systems, modeling of complex systems, and security.

Dr. Larrondo-Petrie just completed a 2nd term on the Board of Governors of the IEEE Education Society where she continues to serve on the Standards Committee and is active in the standards development groups of IEEE 1876-2019—Networked Smart Learning Objects for Online Laboratories, the IEEE P2834—Secure and Trusted Learning Systems, and the IEEE P7004.1 for Virtual Classroom Security, Privacy, and Data Governance. In the past, she also participated in the IEEE Global Committee on Accreditation Activities. She actively participates in the IEEE ICICLE Initiative Board for the Industry Connections Industry Consortium on Learning Engineering (ICICLE). She recently was appointed to the Experts Committee of the European Commission's funded Erasmus Plus initiative

ENTER Engineering Educators Pedagogical Training registry, as the representative of the American continent. The American Society of Engineering Education (ASEE) has appointed her to the ASEE International Activities Committee, serves on the International Advisory Board of the Journal of Engineering Education, has served on the boards of the ASEE International Division, ASEE Minorities in Engineering, and ASEE Women in Engineering Division, and has won the ASEE International Division's International Engineering Education Award. The Society of Women Engineers listed her in their April 2019 issue among the Outstanding Women in Engineering. She serves on the board of the Asociación Iberoamericana de Enseñanza de Ingeniería (ASIBEI, for its acronym in Spanish, translated as Ibero-American Association for Engineering Education) and was awarded the ASIBEI Academic Merit Award in 2019 given to the top 20 most impactful Engineering Education leaders as part of their 20th anniversary celebrations. The Society of Hispanic Professional Engineers (SHPE) awarded her the SHPE National Faculty Advisor of the Year Award in 2018. She was inducted into the Pan-American Academy of Engineering as a Titular Member in 2016. The Global Engineering Deans Council (GEDC) and the International Federation of Engineering Education (IFEES) awarded her the Duncan Fraser International Engineering Education Award in Seoul, South Korea, in 2016, after being nominated by representatives from U.S., Puerto Rico, Portugal, and Africa and unanimously selected by the joint committee of the leadership of GEDC and IFEES. In the past, she served on the board of IFEES as the Vice President for the Americas. She is certified by the European Network for Accreditation of Engineering Education as the Eur-ACE Expert Evaluator in 2018 (Eur-ACE is the European Quality Label for Accreditation of Engineering Education undergraduate and masters' programs). She is in the process of becoming a certified Accreditation Council for Entrepreneurial and Engaged Universities Peer Review Evaluator. In 2020, she won an entrepreneurial competition that included her Lab in a Window startup for smart adaptive remote laboratories for engineering in the TechRunway Incubator and completed National Science Foundation iCORPS training. She is part of the bank of experts for the World Bank Institute and reviews and advises on new universities proposal in Tribal Lands. She is part of the Indo-U.S. Collaboration for Engineering Education initiative and has been appointed the U.S.-Mentor to the State of Gujarat, India, since 2018. She is a McKnight Fellow.

IV. IEEE EDUCATION SOCIETY MAC VAN VALKENBURG EARLY CAREER TEACHING AWARD

This award is given to a member of the IEEE Education Society who has made outstanding contributions to teaching unusually early in their professional career.

The 2021 Education Society Mac Van Valkenburg Early Career Teaching Award was presented to *Dimitris Papailiopoulos*, "for his dedication to teaching excellence, his focus on student-centered learning success, and his championing of active learning strategies in both his own teaching and among colleagues."



Dimitris Papailiopoulos received the ECE Diploma and M.Sc. degrees from the Technical University of Crete, Chania, Greece, in 2007 and 2009, respectively, and the Ph.D. degree in ECE from the University of Texas at Austin, Austin, TX, USA, in 2014, under the supervision of A. Dimakis.

He is an Assistant Professor of Electrical and Computer Engineering with the University of Wisconsin–Madison, Madison, WI, USA. From 2014 to 2016, he was a Postdoctoral Researcher with the University of California at Berkeley, Berkeley,

CA, USA, where he was a member of AMPLab. His research interests span machine learning, information theory, and distributed systems.

Dr. Papailiopoulos is a recipient of the NSF CAREER Award in 2019, two Sony Faculty Innovation Awards in 2019 and 2020, a joint IEEE ComSoc/ITSoc Best Paper Award in 2020, an IEEE Signal Processing Society, Young Author Best Paper Award in 2015, the Vilas Associate Award in 2021, the IEEE Education Society Mac Van Valkenburg Early Career Teaching Award in 2021, the Emil Steiger Distinguished Teaching Award in 2021, and the Benjamin Smith Reynolds Award for Excellence in Teaching in 2019. In 2018, he co-founded MLSys, a new conference that targets research the intersection of machine learning and systems. In 2018 and 2020, he was the Program Co-Chair for MLSys, and in 2019, he co-chaired the 3rd Midwest Machine Learning Symposium.

V. IEEE EDUCATION SOCIETY STUDENT LEADERSHIP AWARD

This award is given to a member of the IEEE Education Society who has made an exceptional contribution to the society while they were an IEEE Graduate Student Member or an IEEE Student Member.

The 2021 IEEE Education Society Student Leadership Award was presented to *Mallellu Sai Prashanth*, "for his exemplary leadership abilities contributing to the growing number of student members involved in IEEE Education Society activities as well as for catalyzing their career development and opportunities."



Mallellu Sai Prashanth received the degree from the Vardhaman College of Engineering, Hyderabad, India.

He is the BlockChain Developer with Tech Mahindra, Hyderabad.

Mr. Prashanth has received the IEEE India Council Outstanding Student Volunteer Award in 2019, where the award was presented by IEEE President Mr. Toshio Fukuda and IEEE R10 Director Elect Deepak Mathur. For his outstanding leadership abilities as an Organizer and Volunteer, IEEE

Vardhaman College of Engineering Student Branch awarded him with an Outstanding Volunteer for excellence in 2019. He is also a recipient of the startup hackathons, codethons, and the Idea Pitching sessions in India. He is also the recipient of the IEEE CS Richard E. Merwin Scholarship, the Winner of IEEE Region 10 SAC Outstanding Volunteer Award, the IEEE Region 10 Educational Activities Outstanding Volunteer Award, and the IEEE Region 10 Young Professional Revol 2021 Program. He presently Contributing as a Webinar and the Online Training Coordinator of the IEEE R10 Student Activities Committee, the Vice Chair of the IEEE India Council Student Coordination Team, a Section Student Representative of IEEE Hyderabad Section, and the Chair of IEEE Vardhaman College of Engineering Student Branch and served as a Social Media and Publicity Coordinator for the IEEE Region10 Student Activities Committee where he committed and able to make a good impact under the guidance of SAC. He has been holding the IEEE Collabratec Coordinator under IEEE R10 SAC in spreading the word and main motto of IEEE Collabratec and IEEE Students community across the section in various events and student branches. He held the Responsibility of Social Media Team Lead of IEEE India Council Student Coordination Team 2020 in which it is good volunteering and a leadership opportunity to volunteer at IEEE India Council. He also leads the IEEE India TEMS as a Student Chapter Representative at TEMS India for the year 2020 and a Student Chapter Representative at IEEE Computer Society Hyderabad Chapter. He was also held as the Student Network Representative for the year 2019 and 2020, in which, his enthusiastic support as a volunteer to the Section and Chapter activities, new initiatives, contributions, demonstrating administrative abilities and leadership skills, and commitment for technical development of Engineers and Students at large is highly appreciated. For the enthusiastic support as the volunteer of the IEEE India Council, IEEE Hyderabad Section, and IEEE Computer Society Chapter and commitment to the new initiatives and for the technical development of students.

VI. IEEE EDUCATION SOCIETY DISTINGUISHED CHAPTER LEADERSHIP AWARD

This award is given to a member of the IEEE Education Society who has, over a sustained period of time, made an exceptional contribution to the Society, which has manifested itself at a local Chapter.

The 2021 IEEE Education Society Distinguished Chapter Leadership Award was presented to *Diana Andone*, "for successful promotion and implementation of digital learning activities beyond the STEM disciplines and her innovative contributions in IEEE Education Romania."



Diana Andone received the Ph.D. degree in designing eLearning spaces for digital students from Brighton University, Brighton, U.K.

She is the Director of the eLearning Center, Politehnica University of Timisoara, Timişoara, Romania, responsible for planning and implementing digital technologies, online learning technologies, and the university award winning Virtual Campus CVUPT. She is also an Associate Professor with the Politehnica University of Timisoara, in the area of multimedia, interactive, and Web technolo-

gies. Since 1998, she has been teaching course modules in universities from U.K., France, USA, Finland, Italy, and Greece. She has extensive research experience with intense publication (over 17 books, 100 research papers, 11 best paper awards, reviewer at six major journals, and several other publications, an Associate Editor of IEEE TRANSACTIONS ON EDUCATION, and the Co-Chair IEEE ICALT iOpenLearn) and more than 30 research and educational projects, mainly funded by the European Commission. She is passionate about the ubiquitous access to technologies and how they can be used to improve people's life.

Dr. Andone is a recipient of the IEEE Education Society 2021 Distinguished Chapter Leadership Award. She actively promotes the use of OERs, MOOCs, and the open education principles, developing UniCampus.eu for training for digital skills, acting in international associations (EDEN, IEEE, AACE, IADIS, and IAFES) actively supports the local startup movement (StartUp Weekend, HackTM, hackathons, and CoderDojo) and Girls in Tech, Women in Tech, and STEM education. She also acts in the Board of Romanian NGOs (Pentru Voi Foundation), in Timisoara 2023 European Capital of Culture Task Force, and in other voluntary organizations. She is an EDEN Senior Fellow. She was the EDEN Vice-President of Communication and Communities from 2018 to 2021 and has been a member of IEEE Education Society Board of Governors since 2021 and IEEE Romania Section the Educational activities Chair since 2019. https://elearning.upt.ro/ro/diana-andone/.

VII. IEEE EDUCATION SOCIETY CHAPTER ACHIEVEMENT AWARD

This award is given to a chapter of the IEEE Education Society that provides exemplary technical activities, membership services, and societal activities to its members.

The 2021 IEEE Education Society Chapter Achievement Award was presented to the *Bangalore Chapter*, "for contributions to the engagement and new international activities of the IEEE Education Society members in the Bangladesh (and India) area."

APPENDIX: RELATED ARTICLES

- [A1] J. J. Sluss, Jr., "2020 IEEE Education Society awards," *IEEE Trans. Educ.*, vol. 64, no. 1, pp. 74–77, Feb. 2021.
- [A2] J. J. Sluss, Jr., "2019 IEEE Education Society awards, 2019 Frontiers in Education Conference awards, and selected IEEE awards," *IEEE Trans. Educ.*, vol. 63, no. 1, pp. 63–68, Feb. 2020.
- [A3] J. J. Sluss, Jr. et al., "2018 IEEE Education Society awards, 2018 Frontiers in Education Conference awards, and selected IEEE awards," IEEE Trans. Educ., vol. 62, no. 1, pp. 57–63, Feb. 2019.
 [A4] E. C. Jones, Jr. and J. J. Sluss, Jr., "2017 IEEE Education Society
- [A4] E. C. Jones, Jr. and J. J. Sluss, Jr., "2017 IEEE Education Society awards, 2017 Frontiers in Education Conference awards, and selected IEEE awards," *IEEE Trans. Educ.*, vol. 61, no. 1, pp. 74–83, Feb. 2018.
- [A5] E. C. Jones, Jr. et al., "2016 IEEE Education Society awards, 2016 Frontiers in Education Conference awards, and selected IEEE awards," IEEE Trans. Educ., vol. 60, no. 1, pp. 67–77, Feb. 2017.
- [A6] E. C. Jones, Jr., "2015 IEEE Education Society and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 59, no. 1, pp. 59–68, Feb. 2016.
- [A7] E. C. Jones, Jr., "2014 IEEE Education Society awards, Frontiers in Education Conference Awards, and selected IEEE awards," *IEEE Trans. Educ.*, vol. 58, no. 1, pp. 58–66, Feb. 2015.
- [A8] E. Tovar, "2013 IEEE Education Society awards and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 57, no. 2, pp. 122–128, May 2014.
- [A9] M. Castro, "2012 IEEE Education Society awards and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 56, no. 2, pp. 246–251, May 2013.
- [A10] M. Castro, "2011 IEEE Education Society awards and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 55, no. 2, pp. 291–298, May 2012.
- [A11] S. M. Lord, "2010 IEEE Education Society awards and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 54, no. 2, pp. 332–337, May 2011.
- [A12] T. Mitchell, "2009 IEEE Education Society awards and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 53, no. 2, pp. 335–340, May 2010.
- [A13] S. M. Lord, "2008 IEEE Education Society awards and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 52, no. 2, pp. 286–291, May 2009.
- [A14] S. M. Lord, "2007 IEEE Education Society awards and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 51, no. 2, pp. 290–295, May 2008.
- [A15] J. L. A. Hughes, "2006 IEEE Education Society awards and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 50, no. 2, pp. 157–162, May 2007.
- [A16] J. L. A. Hughes, "2005 IEEE Education Society awards and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 49, no. 2, pp. 309–313, May 2006.
- [A17] D. M. Litynski, "IEEE Education Society awards and Frontiers in Education Conference awards," *IEEE Trans. Educ.*, vol. 48, no. 3, pp. 350–358, Aug. 2005.



James J. Sluss, Jr. (Senior Member, IEEE) received the B.S. degree in physics from Marshall University, Huntington, WV, USA, in 1984, and the M.S. and Ph.D. degrees in electrical engineering from the University of Virginia, Charlottesville, VA, USA, in 1986 and 1989, respectively.

He was the Director of the School of Electrical and Computer Engineering from 2005 to 2014 and a Senior Associate Dean of the Gallogly College of Engineering, Norman, OK, USA, from 2014 to 2016. Since 2016, he has been serving as an Associate Vice President for Academic Affairs and the Dean of the Tulsa Graduate College, University of Oklahoma (Tulsa Campus), Tulsa, OK, USA.

Dr. Sluss, Jr. was the recipient of the IEEE Education Society Edwin C. Jones, Jr. Meritorious Service Award in 2008, and the International Engineering Educator *Honoris Causa* "ING. PAED.IGIP h.c." by the International Society for Engineering Education "for outstanding contributions in the field of Engineering Education" in 2015. He has been serving on the Frontiers

in Education (FIE) Steering Committee since 2012, served as the Technical Program Co-Chair for FIE 2007, the General Go-Chair for FIE 2013, and as the FIE Steering Committee Chair from 2018 to 2020. He has served as a member of the Board of Governors of the IEEE Education Society from 2000 to 2020, serving in a number of officer positions, including a two-year term as the President from 2015 to 2016. He is a Senior Member of the IEEE Education Society and the IEEE Communications Society. He is a member of the Optical Society of America, the International Society for Engineering Education, and the American Society of Engineering Education.



Russ Meier (Fellow, IEEE) received the B.S., M.S., and Ph.D. degrees in computer engineering from Iowa State University, Ames, IA, USA.

He is currently a Professor of Electrical Engineering and Computer Science with the Milwaukee School of Engineering (MSOE), Milwaukee, WI, USA. He has a 28-year history of teaching at the bachelor and graduate levels. His research interests include engineering education, embedded systems, evolvable hardware, and computer architecture.

Dr. Meier's teaching skills have been recognized with an Iowa State University Teaching Excellence Award, the Iowa State University Warren B. Boast Award for Undergraduate Teaching Excellence, and the MSOE Oscar Werwath Distinguished Teacher Award. In addition to his teaching career, he works to improve engineering education as part of his professional service. Over a 20-year period, he has helped to create multiple workshops, conferences, online seminars, and certification programs for engineering and computer science professors. He is a member of the

IEEE-HKN, the IEEE Computer Society, the IEEE Education Society, the American Society for Engineering Education (ASEE), and the ASEE Electrical and Computer Engineering and Educational Research and Methods Divisions. He served as the IEEE Education Society President in 2019 and 2020.



Steve E. Watkins (Senior Member, IEEE) received the Ph.D. degree from the University of Texas at Austin, Austin, TX, USA, in 1989.

He is the Interim Chair and a Professor of Electrical and Computer Engineering with the Missouri University of Science and Technology (formerly, the University of Missouri–Rolla), Rolla, MO, USA, where he directs Applied Optics Laboratory and has research interests that include fiber-optic sensing, smart structures instrumentation, imaging systems, unmanned aerial vehicle applications, and engineering education. He was a Distinguished Visiting Professor with USAF Academy, Colorado Springs, CO, USA, an IEEE-USA Congressional Fellow, a Visiting Physicist with the Phillips Laboratory (USAF), Kirtland Air Force Base, Albuquerque, NM, USA, and a Visiting Scholar with the Basic Research Laboratories, NTT, Tokyo, Japan. He has been involved in several field-monitoring projects such as the Missouri S&T Smart Composite Bridge. He has over 140 publications, including 54 archival papers.

Dr. Watkins is a member of SPIE-The International Society for Optics and Photonics (Fellow Member) and the American Society for Engineering Education (ASEE). He is active in the professional community, including a term as the IEEE-Eta Kappa Nu President, two-terms as an IEEE Education Society Vice-President, and service in board positions within the IEEE Intelligent Transportation Systems Society and ASEE. He is the Co-Editor-in-Chief of *The Bridge* magazine of IEEE-Eta Kappa Nu and the Co-Chair of the editorial board for the IEEE Teaching Excellence Hub.