



IEEE Metro Los Angeles Section Volunteers Contributions to the Schools and the Community*

What does IEEE do for its members and the community? and who started it? In 1884 Thomas Edison and 24 other prominent engineers founded the American Institute of Electrical Engineers (AIEE) in New York; in 1963 the name was changed to the Institute of Electrical and Electronics Engineers when it was merged with the Institute of Radio Engineers. IEEE membership is currently 420,000 worldwide. IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity. IEEE membership benefits its members and the community include network with other technology professionals, establish a professional profile highlighting their accomplishments, joining and participating in discussions on various technical interests, creating a group to share and collaborate on projects IEEE events and activities throughout the world.

The following are examples of the IEEE Metropolitan LA Section volunteers' contributions to schools & the community:

Frank Ashrafi, PhD, P.E., chair of the Power and Energy Society chapter (PES) & Zaw M. Htin, MS.P.E. of DWP, secretary of the PES chapter, at the suggestion of Jacky Wong, MSEE, P.E. of MWD, PES treasurer, organized an IEEE Tour of the Sylmar Converter Station System to keep the community informed of this very important power source to the Los Angeles area.

Jason Rondou, MSEE, P.E., Director at DWP and PES chapter, Past chair & advisor received an IEEE award for his outstanding contributions & leadership in sharing IEEE's technological innovation and excellence for the benefit of IEEE members and the Southern California Community.

Sharmila Bokka, MSEE, P.E. Young Professionals Group Chair is often sought as a speaker on "Landing your first job" at the universities and at professional meetings. She has inspired many, resulting in several launch a successful career just as they graduate. She received an Award from the IEEE Los Metropolitan Los Angeles Section for her presentations on Landing your First Job at the PES Chapter Meeting held at Luminarias Restaurant in May 2018.

Ahmed Douik, PhD candidate at the California Institute of Technology (Caltech), the treasurer of the computer society and advisor of the Young Professional's Group, organizes tours at JPL to increase the knowledge of the outstanding developments been done at JPL. Ahmed was selected as the most outstanding YP in IEEE Region 6 (R6 are the 12 western states), he received an award for that.

MLA GRSS Chapter brings people from industry, academia, and government together to talk about remote sensing technologies. The board members for 2020 are Chapter Chair Dr. Rashmi Shah, Research Technologist at Jet Propulsion Laboratory (JPL); Vice Chair Kevin Romero, Senior Engineer at

Northrop Grumman (NGC); Treasurer Dr. Mariko Burgin, Systems Engineer at JPL; Secretary Scott Almond, Engineer at NGC; and YP representative Dr. Shenyue Jia, Postdoctoral Researcher at Chapman University. They are advised by past chair and GRSS adcom member Dr. Paul Rosen, Scientist at JPL. They organize events at NGC, Caltech, USC, and Chapman University to keep the community informed of the latest technological developments in the area of remote sensing. Their GRSS discussion panels, which take place at NGC in Azusa, bring together members from the community under the umbrella of geosciences and remote sensing.

Dr. Shouhua Huang of JPL, cofounder of the Photonics, goes every year to Maranatha High School in Pasadena, CA as a volunteer science adviser. He has been passionately coordinating / supporting the school's science related activities (Science Club, Science Fair, etc.) for over six years. The science competition teams which he mentored include Science Bowl, Science Olympiad, and SeaPerch Underwater Robotics. The SeaPerch team won the championship on Southern California Regional competition and 4th place of the Engineering Notebook in the International Competition event. In addition to supporting Maranatha High School, Dr. Huang has served as a volunteer / science judge for following events for about 20 years: Science Bowl, Ocean Science Bowl, FIRST Robotics competition, California Science and Engineering Fair (CSEF), Intel International Science and Engineering Fair (ISEF), LABESTs, and several local Elementary and High schools' science fairs, which have inspired lots of young generation to pursue a scientific and technical career.

Brian Kewo, P.E. IEEE Professional Activities Committee chair and CEO of Kewo Corporation, goes beyond the call of duty to help the community. He founded his corporation to form careers in the community. He left his great job at DWP to start Kewo Corporation in Los Angeles. In 2019, IEEE selected the Kewo Corporation as the award winner for the most outstanding small company in its Region 6. This area comprises of the twelve western states. The selection was based on the Outstanding Corporate Service Kewo corporation provides.

Eremita Miranda, MBA, P.E., Past President of Southern California Edison Employees Roundtable, participates yearly as judge in the Pasadena Lion's Club Student Project Contest and as a judge in the Clark Magnet High School Yearly Senior Project Competition. She provides support for teachers at John Muir High School in Pasadena to do projects that encourage students to pursue technical careers. She organized a tour of the Advanced Southern California Edison Laboratory in Westminster, California, to keep IEEE members informed.

Eremita Miranda, MBA, P.E. is a judge at the INTEL International Science & Engineering Fair (ISEF), a major yearly Intel-sponsored event held at the Los Angeles Convention Center or at the Anaheim, Orange County Convention Center; she is scheduled to be in Anaheim on May 13, 2020.

Eremita Miranda, MBA, MBA, P.E. IEEE representative, respond to requests from organization's on behalf of IEEE. One example is the LA Times questions on what IEEE provides to its members a few years ago. She keeps abreast of developments in the community such as the Kaiser Permanente's Medical School expected to be deployed in 2020. She is seeking a speaker from Kaiser that will inform meeting attendees on their major technological financial investments that will positively impact the employment in the community.

Kay Nguyen, of Southern California Edison (SCE) Section secretary, Jens Roynlid of SCE, treasurer of the Industrial Application Society chapter, Malak Shirkhani of SCE, Section chair & Eremita Miranda of SCE, Section representative, organize events at Southern California Edison to keep Southern California residents abreast of the latest technological developments in California and the US in the power business.

Carlos Ontiveros, a Young Professional (YP) at Northrup Grumman, the Robotics and Photonics chapter webmaster and Leandro Wong, the Communications and EMBS webmaster created the first section websites; their work became the standard for the other Metro units to follow. The websites have and will continue to expand the communications process among sections.

Kevin Romero Senior engineer at Northrup Grumman (NGC), Vice Chair of GRSS, Dr. Mariko Bergin of JPL, Treasurer of GRSS and Dr. Rashmi Shah also from JPL, GRSS chapter chair, organize events at NGC and at Caltech to keep the community informed of latest technological developments at their companies. Their GRSS discussion panels, which take place at NGC in Azusa, brought together members from the community under the umbrella of geosciences and remote sensing.

Dr. Peter H. Siegel presented a talk to the Young Professionals affinity group entitled, "Millimeter and Submillimeter Wave Applications in Biology: Potential and Challenges", on March 14, 2019. Dr. Siegel has been involved in THz technology development and applications for more than 45 years. He spent 26 years at the NASA Jet Propulsion Laboratory working on astronomy, planetary and Earth science applications of THz, and 12 years at the California Institute of Technology divisions of Biology and Electrical Engineering, developing biological and medical applications for THz, especially low power effects on neurons and most recently, millimeter-wave monitoring of blood chemistry. He is also an IEEE Fellow, and has served as an IEEE MTT-S Distinguished lecturer, and founding Editor in Chief of IEEE Transactions on Terahertz Science and Technology. He is currently an elected member of MTT-S AdCom and founding Editor-in-Chief of a new open access journal: IEEE Journal of Microwaves, to be released in 2021. Gregorio Valdivia from the Metro LA Young Professionals committee reached out to Dr. Siegel thru the MTT-S Speakers Bureau.

Katayoon Shirkhani, Metro LA Section Membership Chair, obtains pertinent IEEE handouts for the other volunteers to distribute at the High Schools, colleges and universities to encourage students to become members to help the communities and their careers.

The EMBS (Engineering in Medicine) Chapter Chair, USC Professor, Dr. Bouteiller, chapter secretary, Dr. Gene Yu, USC researcher, Wesley Surento Employment chair and EMBS Webmaster Leandro Wong, are making an impact at the local schools and the community. The EMBS chapter is very important to our section as we are thriving in the challenges and opportunities that are open to solve virus spread around the USA and the world. A great event we are about to participate is the opening of the Kaiser Permanente School of Medicine in 2020, a major technological and financial investments that will positively impact the employment in the community, especially for our EMBS members.

Dr. David Ting of JPL and Metro Section Photonics officer went to California State University Bakersfield to encourage the students to pursue careers in technology. He presented a talk on one of his JPL projects. Several students became enthusiastic about technology. As a 2018-2019 IEEE Photonic Society Distinguished Lecturer, he also gave talks at universities in the US, UK, and Australia.

Gregorio Valdivia from the Metro LA Young Professionals committee reached out to Dr. Siegel through the MTT-S Speakers Bureau looking for an exceptional speaker to revitalize the YP Group. He selected Dr. Siegel of Caltech and his talk revitalize the YPs; This Metro Section Affinity Group has been active ever since.

Tom Walker, Senior Director of Engineering at Synopsis Inc, Chair of the Computer Society Chapter, unselfishly provided a copy of his presentation on "How to Start your Software Business" to all attendees. Many in the audience were seeking this information to start this business. This presentation is available to IEEE members. Send an email with your IEEE membership number to eremitamiranda@outlook.com to get your copy.

Mr. James Weiler, MTT-S chapter chair, and his son Andrew held robotics competitions at La Canada High School for many years in order to encourage our youth to pursue technological careers. Dr. Siegel, an IEEE Fellow, has served as an IEEE MTTS Distinguished lecturer, and founding Editor in Chief of IEEE Transactions on Terahertz Science and Technology. He is currently an elected member of MTTS AdCom and founding Editor-in-Chief of a new open access journal: IEEE Journal of Microwaves, to be released in 2021.

Calvin Kwong, a recent UCR graduate and MTT-S and Computer chapter webmaster created a Website for MTTS to facilitate communication with MTT-S chapter members and the Community.

Jacky Wong, Treasurer of IEEE Power & Energy Society, participates in the high school Solar Cup event sponsored by the Metropolitan Water District and IEEE Metro Section. In Solar Cup, competing high schools are tasked with creating the most efficient and quickest boat powered fully from solar energy. "More than 45 high schools across six counties participate in this event. Through the program, students learn about conservation of natural resources, electrical and mechanical engineering, problem solving and much more.

Leandro Wong, the Webmaster for the Communications' society chapter created the Communications Society website in order to help the community keep abreast with development of the Industry. It is the Communication Society's goal to spread the news of emerging technology in the realm of communication, including the imminent rolling out of new 5G technology.

The Robotics Automated Society (RAS) Chapter founder and her volunteers have been contributing, and continue to contribute, to the excellent performance of the local schools, to the communities in the Los Angeles Metro area, and around the world. The following are some examples of outstanding RAS members and their lifetime achievements that have helped others.

Andrew Huang is a student at Caltech, Class of 2021, and RAS liaison for Caltech, CSULA, and USC Student Branches. Andrew reaches out to the students to help them improve their career strategies.

Dr. Shouhau Huang is Senior Member Eng. Staff at JPL and is an active RAS member and Section Membership Elevation Chair. He helps IEEE members, regardless of section affiliation, increase their status in the profession.

Carlos Ontiveros, a Young Professional at Northrup Grumman, has created websites for the RAS & Photonics chapters in order to improve communication within the section units and other IEEE entities.

Dr. Mario Munich, RAS chapter chair, is the Chief Engineering Officer at Embodied, Inc. Embodied develops and builds Moxie, a social companion, which helps children enhance their social, emotional and cognitive skills by creating a unique and personalized interaction experience for them.

Dr. Larry Matthies is a Senior Research Scientist at JPL and RAS chapter Vice Chair. Dr. Matthies gives presentations about robotics to elementary school students and lectures in college classes at undergraduate and graduate levels.

Professor Paul Wilkinson of the USA Academy, RAS Employment chair, encourages students to pursue technical careers. He reaches out to technical companies and maintains contacts with their staff to obtain information on their Internship Programs. One example is his continued interaction with JPL's Human Resources hiring manager.

Dr. Paul Backes is a supervisor at the Mobility and Robotic Systems Section at JPL and a session co-chairman for the IEEE Aerospace Conferences. Dr. Backes continues to contribute to the schools the community. His contributions to his company, IEEE and the performance of the industry, earned him some of the most prestigious awards in technology.

Eremita Miranda, MBA, P.E. has been the Metro LA section former chair and section representative to all of its units. She is the founder of the Young Professionals (YP) Affinity Group and of several Metro units. She continues to add chapters, as needed, to serve IEEE members. She founded this RAS chapter is to recognize members doing outstanding work for the schools, the community, and those who act for the betterment of communities around the world.

Please contact eremitamiranda@outlook.com if you have any questions or inquiries.