

# ROBOFEST 2016 World Championship

## Bios of Exhibition Judges

Lawrence Technological University  
As of May 11, 2016

**Javier Alcazar, Ph.D.** Alcazar received a Ph.D. in robotics and controls from Cornell University. Afterwards he joined General Motors R&D to work 7+ years in vehicle dynamics and manufacturing system research laboratories. He work on autonomous grapping technics, Human modeling and Human Robot Interaction with Robonaut 2. He moved on to work for Honda R&D of Americas Inc. as part of the Intelligent Transportation Systems department. His research focused on Connected and Autonomous vehicles and Automated Highway systems. He is now at Continental Automotive R&D working on the first generation of autonomous driving. Dr. Alcazar is also the IEEE Chair of Robotics and Automation Societies in Southeast Michigan.

**Katherine Bis** Katie received her B.S. in Mechanical Engineering and her B.A. in Child Psychology from the University of Michigan. She worked for 15 years at Lionel Trains as a manufacturing engineer, design engineer and then as an Engineering Program Manager. She is currently self-employed as an Educational Consultant and has developed a tutoring program for STEM subjects and Academic test prep. She has been actively involved in coaching and coordinating FLL, Robofest, Science Olympiad, and/or WRO teams for the last 7 years. She is a Robofest coordinator in charge of Exhibition and among others.

**Kyoung-Tae (KT) Kim, Ph.D.** Dr. Kyoung-Tae (KT) Kim is Associate Professor at College of Central Florida. He holds a B.S. in Geology, an M.S. in Geophysics, and a Ph.D. in Seismology. Upon completion of his doctoral degree at the State University of New York at Binghamton, he worked at the Sandia National Laboratories in New Mexico. His research focused on seismic imaging and inversion, numerical modeling, parallel computation, algorithm development, and signal analysis. Prior to his current position, he has also taught several institutions and programs including Macomb Community College and John Carroll University. In addition to these formal college settings, he has had opportunities to work with pre-service and in-service teachers, teacher educators, and grade school students in informal settings. His work in education research focuses on developing instructional strategies for students' conceptual understanding and teacher candidates' perceptions about teaching and learning science and mathematics.

**Ji-Eun Lee, Ed.D.** Dr. Ji-Eun Lee is Associate Professor in the Department of Teacher Development and Educational Studies at Oakland University. Her major teaching and research areas include K-8 mathematics education and teacher preparation. She received her Ed.D. in Educational Theory and Practice from SUNY Binghamton, her M.Ed. in Elementary Education from Korean National University of Education, and her B.Ed. in Elementary Education from Seoul National University of Education. She has published more than 30 papers on teacher preparation and instructional strategies that can facilitate students' mathematical learning and made frequent presentations in both the United States and South Korea. She serves as an associate editor, consulting editor, and reviewer for multiple professional journals. She also has been involved in various projects in collaboration with local educational agencies by serving as a developer of curriculum/assessment projects, an organizer of after school tutoring programs, and a co-developer/coordinator of local competitive math initiatives.

**Dr. Ramiro Marrero** CENIPAD Center Director A.C., Main Contact Cisco Cenipad, Technology director at CENIPAD A.C., Project Manager in CENIPAD Atlacomulco Mexico, Team robotics coach II International Cup in the international robotics competition at IPN Mexico, Director of medical brigades to Mexico, Homeschooling National Conference organizer.

**John M. Miller M.D.** Dr. John M. Miller is a pediatrician and volunteer physician at St Frances Cabrini Clinic (perhaps the oldest free clinic in the U.S.) He received his medical degree from University of Michigan Medical School. He had taught in the Henry Ford Health System for 25 years and has been teaching in Computer Science and Bioinformatics at Lawrence Tech for 14 years. His first database application was for the University of Michigan Heart Station 44 years ago. His first microprocessor project was for monitoring airflow in toddlers' tracheotomy tubes in the PICU 32 years ago.

**Thassyo Pinto** Thassyo Pinto received his B.S. in Mechatronics Engineering from Universidade Salvador (UNIFACS) in Brazil. As an undergraduate student, he had the opportunity to work as a volunteer in different organizations, participating and organizing seminars, workshops and competitions promoting technology awareness. He has experience in automotive industry, working as a vehicle mechanical package analyst, and as a sign-off engineer in the vehicle evaluation and verification area at Ford Motor Company. He is now a Ph.D. student in Electrical Engineering at Michigan State University, and a member of the Smart Microsystems Lab. His research interests are in soft robotics, evolutionary robotics and biorobotics. He is also an active member and volunteer of the IEEE organization and Robotics and Automation Society.

**Ira Russell** Ira received a Bachelor of Science degree in Electrical Engineering from the University of Michigan, and a Master of Science degree in Engineering Management from the University of Detroit. Ira's diverse engineering experiences include both electrical power grid control and automotive electronics hardware and software design. Early in his career he helped launch the initial computer telemetering systems for the Detroit Edison power grid, and later worked several years in Tanzania, East Africa on rural village electrification projects. He has over 30 years of experience in design, development, manufacturing, supervision, and management of automotive electronic systems for Ford motor Company. Ira is the former Manager of Advanced Technology Planning for the Ford Electronics and Automotive Components Divisions and retired from Ford / Visteon as Manager of Hardware and Software Product Assurance for Cockpit Electronics and Subsystems. Ira has mentored several middle school Robofest teams in the past and has been a volunteer Robofest judge for over ten years.

**Rahamath Shaik** Graduated with B.S. degree in Electrical Engineering, currently working as Sr. Software Engineer. He has been interested in electronics and designing and build custom circuits. He has coached/mentored Science Olympiad, FIRST Lego League and Robofest teams for about eight years. For past 4 years he is the main mentor for FIRST Robotics team from International Academy East high school, Troy. He teaches students in mechanical and electrical design and building competitive robots. His interest in full automation drives him to keep up to date with different sensors, materials and new technologies. If he is not busy teaching students, he is experimenting with new sensors and programing with Arduino, VEX Cortex micro controllers and more advanced roboRIO from National Instruments. Arduino IDE, EasyC and Labview are some of his favorite programming tools for automation. He believes in inspiring young generation to explore STEM and training them to be good leaders. He actively volunteers as Technical and/or Exhibition judge for Robofest and FIRST Lego League competitions.

**Lior Shamir, Ph.D.** Associate Professor of computer science at Lawrence Technological University. Specializes in artificial intelligence (AI), pattern recognition, and complex data analysis in several scientific disciplines. He directed numerous research projects related to computational intelligence, and developed novel AI methodology for machine perception of complex human-created data such as art and music. His methodology and research has led to numerous data-enabled discoveries in fields such as astronomy, cosmology, medicine, biology, zoology, and more. He is primary author of over 70 peer-reviewed scientific papers, and his research has been noted by public figures such as AI Kurzweil and Richard Dawkins. Many of his discoveries have been featured on the popular press such as NBC, CBS, Fox, Scientific American, Discovery, NPR, Wired Magazine and more, and he is frequently interviewed by the premier international popular media on topics related to machine perception.

**Queen Umeana** Graduated with a B.S. degree in Geological Earth Sciences and M.S. in Civil Engineering with emphasis in GIS from the University of Colorado at Denver. She has been interested in GIS, engineering design and in robotics to encourage STEM oriented learning in youth. Sh has coached/mentored/Judged for the Michigan mathematics competition. She taught at the University of Science and Technology in Beijing, China. She has volunteered for many years with programs focused on increasing the number of minorities entering STEM fields. Her interest is to develop a charter school that increases STEM attitudes, knowledge, skills and workforce capacity in the use of robotics and geospatial technologies as an informative platform for middle school students. She is now a Ph.D. student in Technology / Engineering Management with emphasis in GIS at Eastern Michigan University, Ypsilanti, MI and a member of the National Association of Black Engineers. Her research interest focuses on STEM Curricula in middle school with GIS/Engineering in science classrooms.